ATLAS ENVIRONMENTAL
ENGINEERING, INC.
LICENSE NUMBER 729641

January 15, 2005

Mr. Arman Toumari
California Regional Water Quality Control Board
Los Angeles Region
320 West 4th Street, Suite 200
Los Angeles, California 90013

RE: **G&M Oil Company Station #51**
2155 South Atlantic Boulevard
Commerce, California
Transmittal of Site Conceptual Model Update

Dear Mr. Toumari:

On behalf of the property owner/operator, Atlas Environmental Engineering, Inc. (ATLAS) presents this update to the Site Conceptual Model (SCM) for the subject site (**Figures 1** and **2**). This SCM update has been prepared with the aid of the non-steady state spreadsheet analytical model developed by Messrs. Tom Shih and Yue Rong of the Los Angeles Regional Water Quality Control Board (LARWQCB). The model is intended to delineate the surface and subsurface conditions at the site and near vicinity, define the constituents of concern and their existing as well as projected distribution, and identify any existing and/or potential receptors. In addition, the model can be utilized to identify other possible environmental concerns that need to be addressed. This SCM was prompted by the LARWQCB letter of February 10, 2004. The following sections present a brief description of the site characteristics, model assumptions, input data, model results and a discussion. Please note that much of the descriptive and historic site information has been presented in the "*Preliminary Site Conception Model*" (PSCM) and it has not been included in this update.

WELLS AND CONDUITS

Based on data provided by the Los Angeles County Hydrogeologic Unit, there are seven (7) active wells within a one-mile radius of the site. The well data is summarized in **Table 1**.

Well 2839C (No. 02S12W08P01S) is the nearest well and is located approximately 1,600-feet from of the site. There are no known oil wells on the subject site.

Based on the depth to groundwater the existing utilities at the site should not act as a potential conduit for transport of contaminants.

There are presently no known active or potentially active faults in the current Alquist-Priolo designated areas. However, the site is within an area designated as a potential liquefaction hazard zone.

GROUNDWATER FLOW DIRECTION AND GRADIENT

On October 10, 2005, depth to groundwater beneath the site ranged from approximately 87- to 88-feet below the top of the well casings. Light non-aqueous phase liquid (LNAPL) was observed in monitoring well MW-11 at an apparent thickness of 0.09-feet. The groundwater depth data collected was used to determine the groundwater flow direction and gradient across the site. Based on the data collected by ATLAS, the flow direction across the site is southwesterly at a gradient of approximately 0.002. A groundwater elevation contour map is presented on **Figure 3**. Groundwater monitoring data is presented in **Table 2**. Status reports, field data, and sampling procedures are included in **Appendix A**.

GROUNDWATER ANALYTICAL RESULTS

Groundwater samples were collected from all wells on October 10, 2005 and submitted to Southland Technical Services, Inc. for analysis. The groundwater samples were analyzed for TPHg and TPHd by EPA Method 8015M and for BTEX plus fuel oxygenates by EPA Method 8260B. Concentrations of TPHg ranged from <50 μg/L to 7,480 μg/L; BTEX ranged from <1 μg/L to 1,680 μg/L; MTBE ranged from <2.0 μg/L to 485 μg/L; and TBA concentrations ranged from <10 μg/L to 55.3 μg/L. TPHd, ETBE, DIPE and TAME were not detected at concentrations exceeding the laboratory detection limits. A summary of groundwater analytical and water quality data is presented in **Table 2**. Field Data and Project Status Reports are included in **Appendix A**. Complete labratory reports are presented in **Appendix B.**

ESTIMATION OF RELEASE MASS

Currently, there are no records available indicating the mass of the release. One documented unauthorized release was initially discovered during failed tank testing conducted by other consultants and verified during a preliminary site investigation performed by ATLAS in 1997. The investigation was limited to the area of the diesel tank pits in the southwest corner of the property. The release was reported by G&M Oil Company. In 1999, during

underground storage tank (UST) removal activities, significant levels of TPHg and TPHd were detected from beneath the USTs located in the north corner of the property. **Figures 4** through **13** present the isoconcentration plots for TPHg, benzene, toluene, ethylbenzene, total xylenes, MTBE, DIPE, ETBE, TAME and TBA using the most current groundwater monitoring data. MTBE concentrations versus time have also been plotted for groundwater monitoring wells MW-3 and MW-12, which are presented as **Figures 14** and **15**.

SOURCE REMOVAL/REMEDIATION ACTIVITES

During May 1999, the former USTs were removed and replaced with double walled storage tanks. During tank removal/replacement activities, approximately 357 tons of petroleum hydrocarbon affected soil was removed from the site.

From September 28, 2004 to September 30, 2004, ATLAS conducted soil vapor extraction (SVE) and aquifer characterization pilot tests. The pilot tests were conducted to determine the optimum soil vapor and groundwater extraction rates to maintain adequate control over the site. The highest vapor concentrations were noted in VW-2S (screened from 20- to 40-feet bgs) with concentrations of TPHg at 54,800 ppmv, BTEX at 2,010 ppmv, MTBE at 545 ppmv, ETBE at <21.50 ppmv, DIPE at 44.9 ppmv, TAME at <21.50 ppmv and TBA at <151.5 ppmv. The highest concentration in the deeper screened wells was observed in VW-1D (screened from 50- to 80-feet bgs) with concentrations of TPHg at 26,400 ppmv, BTEX at 523 ppmv, MTBE at 91.2 ppmv, ETBE at <10.75 ppmv, DIPE at 19.1 ppmv, TAME at <10.75 ppmv and TBA at <75.75 ppmv. Detailed results are included in the ATLAS report titled, "*Site Conceptual Model Update and Report of Feasibility Study*", dated October 15, 2004. Using the average soil vapor concentration based on the laboratory data, the initial hydrocarbon-loading rate is expected to be 534 lbs/day.

ANALYTICAL MODEL DATA INPUT/ASSUMPTIONS

Messrs. Tom Shih and Yue Rong, with LARWQCB, developed the model utilized for the conditions at the subject site. The non-steady state analytical model is used to predict the plume travel time required to reach a down-gradient receptor, usually an online domestic supply well. Of importance in this study is the additive MTBE. The model is based on a finite mass advection-dispersion partial-differential equation for contaminant transport processes in groundwater. For the model to provide adequate results several assumptions were made, they are:

- Non-steady state (concentration is a function of time),
- Initial mass discharged is finite and instantaneously introduced as a slug,
- Homogenous aquifer properties,
- No change in groundwater flow direction and velocity,

- The dispersion coefficients are constant and proportional to the velocity (dynamic dispersion regime), and
- Contaminant natural degradation is not considered (e.g., no sorption or biodegradation).

SENSITIVITY ANALYSIS

Following the selection of initial input parameters, the model is calibrated by adjusting the data within reasonable ranges to model predictions. Three (3) parameters that significantly effect the output are the longitudinal dispersivity, groundwater velocity and mass of discharge per unit depth. Therefore, several model runs are completed with these values changed to adjust the model predictions to the measured field data. The input data presented below is a result of the model sensitivity adjustments.

SITE SPECIFIC INPUT DATA

The site-specific data is included in **Appendix C**. The two (2) wells utilized for the model predictions were MW-3 and MW-12. The site is depicted on **Figure 1** in relation to the domestic well (sensitive receptor). Based on the data input, the concentration profiles were completed for the two wells which established MTBE concentration profile for the drinking water well (sensitive receptor). **Figure 14** presents a graph of "*Field Data and Model Predicated Time vs. MTBE Concentration Profile for Down-Gradient MW-3*". **Figure 15** presents a graph of "*Field Data and Model Predicated Time vs. MTBE Concentration Profile for Down-Gradient MW-12*". **Figure 16** presents "*Model Predicted Time vs. MTBE Concentration Profile for Drinking Water Well*".

RESULTS/DISCUSSION

Based on the input data and model output results, the plume has the potential to reach the sensitive receptor within 28,000 days with a MTBE concentration of less than 5 μg/L. Therefore, the likelihood of the existing release (plume) to impact the domestic well at significant contaminant concentrations is remote. Continued quarterly updates of the model predictions will be provided, as needed, using the groundwater monitoring data.

ATLAS proposed the installation of a dual phase extraction remediation system in the report titled "*Site Conceptual Model Update and Final Remedial Action Plan*", dated January 15, 2005. Currently, ATLAS is in the process of designing the system and piping layouts for the subject site. Once approval is received from the LARWQCB, ATLAS will submit design plans to the City of Commerce.

CLOSING

The work conducted by ATLAS has been performed using generally accepted methods and procedures in the environmental field. ATLAS makes no other warranty, either expressed or implied, concerning the information that is contained within this report. The analysis of the samples were conducted by a California Certified Laboratory, however, no warranty as to the validity of the work conducted by the independent laboratory is implied.

Due to the changing subsurface environment, continuing assessments and/or excavation projects may reveal findings that are different than those which are presented herein. This facet of the environmental profession should be considered when basing professional opinions on limited data collected from the projects performed.

This report is valid as of this date. As a result of the passage of time and changing site conditions or integrity of the USTs, piping, dispensing equipment and monitoring wells, deviations to the information contained in this report may occur. Accordingly, information presented in later reports may invalidate this report in partial or whole form. These conditions are beyond the control of ATLAS, and should be considered in basing continuing assessments on the information contained herein after the passage of time.

This report has been prepared by ATLAS for G&M Oil Company. Submission of this report to the appropriate regulatory agencies/parties is recommended and considered the responsibility of G&M Oil Company.

Respectfully submitted,
ATLAS ENVIRONMENTAL ENGINEERING, INC.

Karen Blanchard
Project Geologist

Karl H. Kerner, R.C.E. 44023
Senior Engineer/Project Manager

cc: Ms. Jennifer L. Talbert, G&M Oil Company, Inc. (w/1 enclosure)

TABLES

TABLE 1

REGIONAL PRODUCTION WELL DATA

G&M OIL COMPANY, INC., SERVICE STATION #51

COMMERCE, CALIFORNIA

Well Number (LA County)	Well Number (State)	Date	DTW (ft.)	Surface Elev. (ft.)	Water Elev. (ft.)	MTBE
2828C	2S12W07G01	10/10/2000	87.0	168.8	81.8	N/A
2838	2S12W08C01	10/10/1999	131.5	163.3	31.8	N/A
2838A	2S12W07H01	10/10/2000	142.0	174.2	32.2	N/A
2838B	2S12W08F01	10/10/2000	133.0	161.6	28.6	N/A
2839A	2S12W17D02	10/10/2000	108.0	144.7	36.7	N/A
2839B	2S12W17D02	10/10/2000	114.0	146.1	32.1	N/A
2839C	2S12W08P01	10/10/2000	108.0	148.4	40.4	N/A
2859	2S12W09M01	10/10/2000	108.0	160.0	52.0	N/A
2859A	2S12W09M02	10/10/2000	110.0	160.4	50.4	N/A

Note: Gauging data from Los Angeles County Public Works, Hydrologic Div. and analytical data from California Water Quality Monitoring Database.

N/A - Not Available

TABLE 2 - SUMMARY OF GROUNDWATER ANALYTICAL DATA

G&M OIL CO. STATION #51

COMMERCE, CA

(Concentration, μg/L)

Well	Date	SWE	DTW	PT	E-WATER	TPHg	TPHd	Benzene	Toluene	E-Benzene	Xylenes	MTBE	MTBE (8260)	ETBE	DIPE	TAME	T-Butyl Alcohol
MW-1	5/28/2002	148.21	86.14	0.00	62.07	621	<500	118	28.3	4.7	58.3	--	129	<2	<2	<2	34.7
MW-1	8/27/2002	148.21	86.23	0.00	61.98	433	<500	31.0	2.1	<1	5.8	--	113	<2	<2	<2	53.2
MW-1	11/6/2002	148.21	86.61	0.00	61.60	3670	<500	224	9.3	3.4	18.0	--	806	<4	<4	<4	42.0
MW-1	2/7/2003	148.21	86.73	0.00	61.48	2780	<500	144	23.0	5.0	43.0	--	1640	<4	<4	<4	135
MW-1	5/5/2003	148.21	86.91	0.00	61.30	1670	<500	66.8	27.6	8.8	39.4	--	1220	<4	<4	<4	29.1
MW-1	7/22/2003	148.21	86.99	0.00	61.22	6950	<500	515	123	<50	176	--	5930	<100	<100	<100	<500
MW-1	10/22/2003	148.21	87.23	0.00	60.98	3830	<500	195	26.0	15.0	40.5	--	2160	<10	<10	<10	<50
MW-1	1/26/2004	148.21	87.55	0.00	60.66	2460	<500	112	40.0	<20	90.0	--	1300	<40	<40	<40	<200
MW-1 *	5/12/2004	148.21	87.64	0.00	60.57	1810	<500	122	47.3	13.1	41.9	--	1080	<2	<2	<2	<10
MW-1	8/16/2004	148.21	87.82	0.00	60.39	5070	<500	494	80.6	40.8	123	--	3690	<20	<20	<20	<100
MW-1	10/22/2004	148.21	88.14	0.00	60.07	4670	<500	94.7	6.2	<5	<10	--	587	<10	<10	<10	<50
MW-1	2/4/2005	148.21	88.29	0.00	59.92	4150	<500	221	416	<10	450	--	1680	<20	<20	<20	<100
MW-1	4/4/2005	148.21	88.40	0.00	59.81	273	<500	2.3	1.0	<1	2.4	--	149	<2	<2	<2	<10
MW-1	7/5/2005	148.21	88.43	0.00	59.78	106	<500	<1	<1	<1	<2	--	44.0	<2	<2	<2	<10

SWE - Surveyed Well Elevation.
DTW - Depth To Water.
PT - Product Thickness (apparent).
E-Water - Groundwater elevation.
-- - Not analyzed.
μg/L - Micrograms per Liter.
TPHg - Total Petroleum Hydrocarbons as gasoline, EPA 8015M.
TPHd - Total Petroleum Hydrocarbons as diesel, EPA 8015
MTBE - Methyl tertiary butyl ether.
< - Less than laboratory detection limits.
NA - Not Available.
TAME - Tert-amyl methyl ether.
DIPE - Di-isopropyl ether.
ETBE - Ethyl tertiary-butyl ether.
TBA - T-butyl alcohol.
LPH - Liquid-Phase Hydrocarbons.
* - Sampled on Alternate Date
** - Obtained from a Higher Dilution

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(Concentration, μg/L)

Well	Date	SWE	DTW	PT	E-WATER	TPHg	TPHd	Benzene	Toluene	E-Benzene	Xylenes	MTBE	MTBE (8260)	ETBE	DIPE	TAME	T-Butyl Alcohol
MW-1	10/10/2005	148.21	88.13	0.00	60.08	120	<500	<1	<1	<1	<2	--	99.3	<2	<2	<2	<10
MW-1		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
MW-2	5/28/2002	148.07	85.93	0.00	62.14	614	<500	28.7	17.1	8.0	115	--	20.2	<2	<2	<2	<10
MW-2	8/27/2002	148.07	85.99	0.00	62.08	111	<500	14.2	1.4	1.3	8.5	--	3.0	<2	<2	<2	<10
MW-2	11/6/2002	148.07	86.42	0.00	61.65	57.0	<500	9.0	1.8	1.1	3.9	--	3.0	<2	<2	<2	<10
MW-2	2/7/2003	148.07	86.52	0.00	61.55	101	<500	1.0	6.3	7.3	24.4	--	5.3	<2	<2	<2	<10
MW-2	5/5/2003	148.07	86.69	0.00	61.38	146	<500	11.2	9.1	5.4	22.3	--	7.5	<2	<2	<2	<10
MW-2	7/22/2003	148.07	86.81	0.00	61.26	233	<500	15.6	18.7	6.0	30.2	--	11.6	<2	<2	<2	<10
MW-2	10/22/2003	148.07	87.04	0.00	61.03	73.0	<500	5.7	2.7	2.6	8.5	--	<2	<2	<2	<2	<10
MW-2	1/26/2004	148.07	87.42	0.00	60.65	52.0	<500	5.9	2.9	2.1	9.9	--	<2	<2	<2	<2	<10
MW-2 *	5/12/2004	148.07	87.46	0.00	60.61	93.0	<500	9.0	5.1	3.0	12.7	--	2.3	<2	<2	<2	21.6
MW-2	8/16/2004	148.07	87.65	0.00	60.42	183	<500	<1	<1	<1	<2	--	2.4	<2	<2	<2	<10
MW-2	10/22/2004	148.07	88.00	0.00	60.07	<50	<500	5.3	2.9	<1	6.4	--	<2	<2	<2	<2	<10
MW-2	2/4/2005	148.07	88.14	0.00	59.93	123	<500	2.1	17.3	<1	28.9	--	<2	<2	<2	<2	<10

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TPHd - Total Petroleum Hydrocarbons as diesel, EPA 8015
MTBE - Methyl tertiary butyl ether.
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TAME - Tert-amyl methyl ether.
DIPE - Di-isopropyl ether.
ETBE - Ethyl tertiary-butyl ether.
TBA - T-butyl alcohol.
LPH - Liquid-Phase Hydrocarbons.
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(Concentration, μg/L)

Well	Date	SWE	DTW	PT	E-WATER	TPHg	TPHd	Benzene	Toluene	E-Benzene	Xylenes	MTBE	MTBE (8260)	ETBE	DIPE	TAME	T-Butyl Alcohol
MW-2	4/4/2005	148.07	88.29	0.00	59.78	283	<500	4.0	30.2	7.6	58.7	--	4.2	<2	<2	<2	<10
MW-2	7/5/2005	148.07	88.30	0.00	59.77	<50	<500	<1	<1	<1	<2	--	<2	<2	<2	<2	<10
MW-2	10/10/2005	148.07	87.97	0.00	60.10	<50	<500	<1	<1	<1	<2	--	<2	<2	<2	<2	<10
MW-2		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
MW-3	5/28/2002	147.89	86.04	0.00	61.85	6370	<500	809	362	75.0	670	--	619	<100	<100	<100	<500
MW-3	8/27/2002	147.89	86.15	0.00	61.74	8210	<500	690	295	65.0	270	--	385	<50	<50	<50	<250
MW-3	11/6/2002	147.89	86.55	0.00	61.34	2890	<500	687	253	47.1	143	--	357	<10	<10	<10	<50
MW-3	2/7/2003	147.89	86.67	0.00	61.22	2570	<500	597	199	23.0	121	--	590	<10	<10	<10	<50
MW-3	5/5/2003	147.89	86.85	0.00	61.04	2740	<500	635	163	29.3	116	--	798	<10	<10	<10	<50
MW-3	7/22/2003	147.89	86.94	0.00	60.95	2780	<500	864	192	67.6	171	--	2130	<20	<20	<20	231
MW-3	10/22/2003	147.89	87.12	0.00	60.77	2630	<500	540	183	63.5	141	--	610	<10	<10	<10	<50
MW-3	1/26/2004	147.89	87.46	0.00	60.43	3640	<500	410	221	77.0	259	--	333	<10	<10	<10	<50
MW-3 *	5/12/2004	147.89	87.54	0.00	60.35	4070	<500	831	76.3	138	162	--	732	<4	<4	<4	238
MW-3	8/16/2004	147.89	87.72	0.00	60.17	4270	<500	1190	34.5	193	139	--	830	<10	<10	<10	286

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TAME - Tert-amyl methyl ether.
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MW-3	10/22/2004	147.89	87.96	0.00	59.93	6660	<500	1410	798	238	995	--	708	<10	<10	<10	214
MW-3	2/4/2005	147.89	88.10	0.00	59.79	199	<500	28.7	26.0	1.9	28.6	--	70.7	<2	<2	<2	162
MW-3	4/4/2005	147.89	88.32	0.00	59.57	10600	<500	1970	773	293	1240	--	1560	<20	<20	<20	658
MW-3	7/5/2005	147.89	88.26	0.00	59.63	6710	<500	1600	557	270	1130	--	751	<20	<20	<20	237
MW-3	10/10/2005	147.89	88.00	0.00	59.89	7480	<500	929	1300	332	1680	--	268	<20	<20	<20	<100
MW-3		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
MW-4	5/28/2002	148.58	86.71	0.03	61.89	LPH	--	--	--	--	--	--	--	--	--	--	--
MW-4	8/27/2002	148.58	86.81	FILM	61.77	LPH	--	--	--	--	--	--	--	--	--	--	--
MW-4	11/6/2002	148.58	87.17	0.00	61.41	2950	<500	314	243	47.5	121	--	149	<10	<10	<10	53.5
MW-4	2/7/2003	148.58	87.31	0.00	61.27	1720	<500	337	166	31.0	112	--	282	<5	<5	<5	<25
MW-4	5/5/2003	148.58	87.48	0.00	61.10	720	<500	210	55.0	22.8	63.0	--	219	<10	<10	<10	<50
MW-4	7/22/2003	148.58	87.57	0.00	61.01	1370	<500	280	143	22.4	88.1	--	288	<10	<10	<10	<50
MW-4	10/22/2003	148.58	87.78	0.00	60.80	700	<500	161	24.6	13.3	43.4	--	174	<5	<5	<5	<25
MW-4	1/26/2004	148.58	88.13	0.00	60.45	1350	<500	174	92.6	17.0	67.5	--	129	<4	<4	<4	<20

SWE - Surveyed Well Elevation.
DTW - Depth To Water.
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TBA - T-butyl alcohol.
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Well	Date	SWE	DTW	PT	E-WATER	TPHg	TPHd	Benzene	Toluene	E-Benzene	Xylenes	MTBE	MTBE (8260)	ETBE	DIPE	TAME	T-Butyl Alcohol
MW-4 *	5/12/2004	148.58	88.18	0.00	60.40	10600	<500	4630	897	469	561	--	3490	<40	<40	<40	<200
MW-4	8/16/2004	148.58	88.36	0.00	60.22	12200	<500	4770	1490	226	749	--	3430	<20	<20	<20	172
MW-4	10/22/2004	148.58	88.63	0.00	59.95	2100	<500	617	110	27.4	79.3	--	527	<20	<20	<20	<100
MW-4	2/4/2005	148.58	88.79	0.00	59.79	13700	<500	3060	4370	196	1650	--	2400	<20	<20	<20	<100
MW-4	4/4/2005	148.58	88.97	0.00	59.61	1100	<500	154	63.3	11.5	72.4	--	431**	<4	<4	<4	<20
MW-4	7/5/2005	148.58	88.98	0.00	59.60	1060	<500	104	77.5	21.0	106	--	285	<4	<4	<4	221
MW-4	10/10/2005	148.58	88.64	0.00	59.94	1530	<500	217	114	29.3	311	--	485	<4	<4	<4	<20
MW-4		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
MW-5	5/28/2002	147.45	85.60	0.00	61.85	7280	<500	1100	312	56.3	1550	--	497	<10	<10	<10	<50
MW-5	8/27/2002	147.45	85.72	0.00	61.73	348	<500	48.0	8.5	<5	135	--	104	<10	<10	<10	<50
MW-5	11/6/2002	147.45	86.12	0.00	61.33	483	<500	47.6	15.6	5.7	22.1	--	123	<2	<2	<2	<10
MW-5	2/7/2003	147.45	86.25	0.00	61.20	428	<500	51.6	17.3	<1	31.8	--	169	<2	<2	<2	<10
MW-5	5/5/2003	147.45	86.44	0.00	61.01	871	<500	71.8	22.8	8.8	45.3	--	328	<2	<2	<2	<10
MW-5	7/22/2003	147.45	86.50	0.00	60.95	884	<500	92.6	37.6	8.1	42.3	--	556	<2	<2	<2	47.2

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TPHd - Total Petroleum Hydrocarbons as diesel, EPA 8015
MTBE - Methyl tertiary butyl ether.
< - Less than laboratory detection limits.
NA - Not Available.
TAME - Tert-amyl methyl ether.
DIPE - Di-isopropyl ether.
ETBE - Ethyl tertiary-butyl ether.
TBA - T-butyl alcohol.
LPH - Liquid-Phase Hydrocarbons.
* - Sampled on Alternate Date
** - Obtained from a Higher Dilution

TABLE 2 - SUMMARY OF GROUNDWATER ANALYTICAL DATA

G&M OIL CO. STATION #51

COMMERCE, CA

(Concentration, μg/L)

Well	Date	SWE	DTW	PT	E-WATER	TPHg	TPHd	Benzene	Toluene	E-Benzene	Xylenes	MTBE	MTBE (8260)	ETBE	DIPE	TAME	T-Butyl Alcohol
MW-5	10/22/2003	147.45	86.73	0.00	60.72	225	<500	26.8	12.1	8.4	23.8	--	159	<2	<2	<2	<10
MW-5	1/26/2004	147.45	87.10	0.00	60.35	135	<500	17.7	15.0	9.7	35.1	--	17.7	<2	<2	<2	<10
MW-5 *	5/12/2004	147.45	87.16	0.00	60.29	515	<500	30.5	3.6	<1	17.6	--	245	<2	2.3	<2	<10
MW-5	8/16/2004	147.45	87.30	0.00	60.15	991	<500	220	27.0	3.7	50.2	--	496	<2	<2	<2	18.0
MW-5	10/22/2004	147.45	87.63	0.00	59.82	97.5	<500	1.9	<1	<1	4.8	--	37.8	<2	<2	<2	<10
MW-5	2/4/2005	147.45	87.68	0.00	59.77	136	<500	28.8	35.8	<1	26.4	--	17.4	<2	<2	<2	<10
MW-5	4/4/2005	147.45	87.98	0.00	59.47	398	<500	69.4	33.7	6.9	32.2	--	108	<2	<2	<2	<10
MW-5	7/5/2005	147.45	88.00	0.00	59.45	113	<500	<1	1.5	1.1	5.2	--	27.7	<2	<2	<2	<10
MW-5	10/10/2005	147.45	87.58	0.00	59.87	68.5	<500	1.3	<1	<1	<2	--	30.9	<2	<2	<2	<10
MW-5		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
MW-6	5/28/2002	148.14	86.31	0.23	62.00	LPH	--	--	--	--	--	--	--	--	--	--	--
MW-6	8/27/2002	148.14	86.15	0.01	62.00	LPH	--	--	--	--	--	--	--	--	--	--	--
MW-6	11/6/2002	148.14	87.04	0.60	61.55	LPH	--	--	--	--	--	--	--	--	--	--	--
MW-6	2/7/2003	148.14	87.19	0.57	61.38	LPH	--	--	--	--	--	--	--	--	--	--	--

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< - Less than laboratory detection limits.
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TAME - Tert-amyl methyl ether.
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TABLE 2 - SUMMARY OF GROUNDWATER ANALYTICAL DATA

G&M OIL CO. STATION #51

COMMERCE, CA

(Concentration, μg/L)

Well	Date	SWE	DTW	PT	E-WATER	TPHg	TPHd	Benzene	Toluene	E-Benzene	Xylenes	MTBE	MTBE (8260)	ETBE	DIPE	TAME	T-Butyl Alcohol
MW-6	5/5/2003	148.14	86.83	0.02	61.33	LPH	--	--	--	--	--	--	--	--	--	--	--
MW-6	7/22/2003	148.14	87.48	0.57	61.09	LPH	--	--	--	--	--	--	--	--	--	--	--
MW-6	10/22/2003	148.14	87.74	0.63	60.88	LPH	--	--	--	--	--	--	--	--	--	--	--
MW-6	1/26/2004	148.14	87.91	0.51	60.62	LPH	--	--	--	--	--	--	--	--	--	--	--
MW-6 *	5/12/2004	148.14	88.04	0.55	60.52	LPH	--	--	--	--	--	--	--	--	--	--	--
MW-6	8/16/2004	148.14	88.15	0.41	60.30	LPH	--	--	--	--	--	--	--	--	--	--	--
MW-6	10/22/2004	148.14	88.17	0.00	59.97	8150	<500	159	118	58.3	720	--	107	<2	<2	<2	24.3
MW-6	2/4/2005	148.14	88.28	0.00	59.86	245	<500	8.7	23.5	2.2	35.5	--	50.7	<2	<2	<2	30.0
MW-6	4/4/2005	148.14	88.42	0.00	59.72	3970	<500	39.5	162	57.2	358	--	77.1	<2	<2	<2	<10
MW-6	7/5/2005	148.14	88.46	0.00	59.68	3080	<500	9.5	75.4	47.4	249	--	54.2	<5	<5	<5	<25
MW-6	10/10/2005	148.14	88.12	0.00	60.02	1440	<500	6.2	30.6	16.9	95.8	--	135	<5	<5	<5	<25
MW-6		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
MW-7	5/12/2004	NA	87.03	0.00	NA	160	<500	28.5	2.2	1.6	13.4	--	73.3	<2	<2	<2	<10
MW-7	8/16/2004	147.72	87.26	0.00	60.46	54.4	<500	<1	<1	<1	<2	--	23.7	<2	<2	<2	<10

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MTBE - Methyl tertiary butyl ether.
< - Less than laboratory detection limits.
NA - Not Available.
TAME - Tert-amyl methyl ether.
DIPE - Di-isopropyl ether.
ETBE - Ethyl tertiary-butyl ether.
TBA - T-butyl alcohol.
LPH - Liquid-Phase Hydrocarbons.
* - Sampled on Alternate Date
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TABLE 2 - SUMMARY OF GROUNDWATER ANALYTICAL DATA

G&M OIL CO. STATION #51

COMMERCE, CA

(Concentration, μg/L)

Well	Date	SWE	DTW	PT	E-WATER	TPHg	TPHd	Benzene	Toluene	E-Benzene	Xylenes	MTBE	MTBE (8260)	ETBE	DIPE	TAME	T-Butyl Alcohol
MW-7	10/22/2004	147.72	87.48	0.00	60.24	<50	<500	<1	<1	<1	<2	--	3.2	<2	<2	<2	<10
MW-7	2/4/2005	147.72	87.74	0.00	59.98	<50	<500	<1	<1	<1	<2	--	6.6	<2	<2	<2	<10
MW-7	4/4/2005	147.72	87.88	0.00	59.84	376	<500	92.4	<1	<1	<2	--	168	<2	<2	<2	<10
MW-7	7/5/2005	147.72	87.87	0.00	59.85	<50	<500	<1	<1	<1	<2	--	10.5	<2	<2	<2	<10
MW-7	10/10/2005	147.72	87.57	0.00	60.15	<50	<500	<1	<1	<1	<2	--	<2	<2	<2	<2	<10
MW-7		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
MW-8	5/12/2004	NA	87.18	0.00	NA	2750	<500	975	140	<10	740	--	853	<20	<20	<20	<100
MW-8	8/16/2004	147.76	87.43	0.00	60.33	405	<500	85.4	<2.5	<2.5	24.0	--	75.2	<5	<5	<5	<25
MW-8	10/22/2004	147.76	87.79	0.00	59.97	<50	<500	<1	<1	<1	<2	--	4.0	<2	<2	<2	<10
MW-8	2/4/2005	147.76	88.91	0.00	58.85	72.0	<500	<1	8.5	<1	13.7	--	4.0	<2	<2	<2	<10
MW-8	4/4/2005	147.76	88.10	0.00	59.66	58.5	<500	30.6	<1	<1	<2	--	4.8	<2	<2	<2	<10
MW-8	7/5/2005	147.76	88.12	0.00	59.64	193	<500	<1	5.9	3.9	22.5	--	<2	<2	<2	<2	<10
MW-8	10/10/2005	147.76	87.82	0.00	59.94	<50	<500	<1	<1	<1	<2	--	<2	<2	<2	<2	<10
MW-8		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

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TABLE 2 - SUMMARY OF GROUNDWATER ANALYTICAL DATA

G&M OIL CO. STATION #51

COMMERCE, CA

(Concentration, μg/L)

Well	Date	SWE	DTW	PT	E-WATER	TPHg	TPHd	Benzene	Toluene	E-Benzene	Xylenes	MTBE	MTBE (8260)	ETBE	DIPE	TAME	T-Butyl Alcohol
MW-9	5/12/2004	NA	87.19	0.00	NA	278	<500	114	5.7	<1	50.6	--	4.6	<2	<2	<2	<10
MW-9	8/16/2004	147.64	87.40	0.00	60.24	50.6	<500	119	<1	<1	<2	--	2.0	<2	<2	<2	<10
MW-9	10/22/2004	147.64	87.75	0.00	59.89	76.6	<500	1.3	1.6	<1	14.3	--	<2	<2	<2	<2	<10
MW-9	2/4/2005	147.64	87.88	0.00	59.76	<50	<500	7.7	6.3	<1	7.3	--	<2	<2	<2	<2	<10
MW-9	4/4/2005	147.64	88.06	0.00	59.58	110	<500	3.1	7.4	2.4	17.3	--	<2	<2	<2	<2	<10
MW-9	7/5/2005	147.64	88.12	0.00	59.52	51.9	<500	<1	<1	<1	<2	--	2.8	<2	<2	<2	<10
MW-9	10/10/2005	147.64	87.67	0.00	59.97	<50	<500	<1	<1	<1	<2	--	<2	<2	<2	<2	<10
MW-9		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
MW-10	5/12/2004	NA	87.19	0.00	NA	1060	<500	11.1	<5	<5	12.7	--	1010	<10	<10	<10	<50
MW-10	8/16/2004	147.50	87.40	0.00	60.10	974	<500	57.8	1.9	1.2	12.7	--	711	<2	<2	<2	<10
MW-10	10/22/2004	147.50	87.65	0.00	59.85	1900	<500	28.3	<2.5	<2.5	13.6	--	1250	<5	<5	<5	165
MW-10	2/4/2005	147.50	87.89	0.00	59.61	77.9	<500	18.7	4.0	<1	2.9	--	23.5	<2	<2	<2	17.5
MW-10	4/4/2005	147.50	88.02	0.00	59.48	210	<500	1.3	8.2	2.0	16.6	--	75.1	<2	<2	<2	99.3
MW-10	7/5/2005	147.50	88.03	0.00	59.47	502	<500	<1	2.1	1.7	10.7	--	261	<2	<2	<2	193

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(Concentration, μg/L)

Well	Date	SWE	DTW	PT	E-WATER	TPHg	TPHd	Benzene	Toluene	E-Benzene	Xylenes	MTBE	MTBE (8260)	ETBE	DIPE	TAME	T-Butyl Alcohol
MW-10	10/10/2005	147.50	87.88	0.00	59.62	111	<500	<1	<1	<1	<2	--	70.0	<2	<2	<2	55.3
MW-10		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
MW-11	5/12/2004	NA	88.27	0.03	NA	LPH	--	--	--	--	--	--	--	--	--	--	--
MW-11	8/16/2004	148.68	88.47	0.03	60.23	LPH	--	--	--	--	--	--	--	--	--	--	--
MW-11	10/22/2004	148.68	88.71	0.01	59.97	LPH	--	--	--	--	--	--	--	--	--	--	--
MW-11	2/4/2005	148.68	78.80	0.00	69.88	2090	<500	225	317	17.1	201	--	138	<4	<4	<4	41.7
MW-11	4/4/2005	148.68	87.38	0.00	61.30	324	<500	33.4	49.8	7.1	53.0	--	66.4	<4	<4	<4	30.8
MW-11	7/5/2005	148.68	89.02	0.00	59.66	855	<500	282	50.4	10.4	51.6	--	183	<2	<2	<2	11.1
MW-11	10/10/2005	148.68	88.76	0.09	59.99	LPH	--	--	--	--	--	--	--	--	--	--	--
MW-11		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
MW-12	5/12/2004	NA	86.60	0.00	NA	188	<500	39.5	6.7	<1	17.1	--	60.9	<2	<2	<2	<10
MW-12	8/16/2004	146.77	86.79	0.00	59.98	1040	<500	379	7.0	<1	29.8	--	402	<2	<2	<2	<10
MW-12	10/22/2004	146.77	87.06	0.00	59.71	849	<500	49.6	20.2	6.9	30.8	--	138	<4	<4	<4	<20
MW-12	2/4/2005	146.77	87.16	0.00	59.61	428	<500	143	8.3	<1	13.6	--	125	<2	<2	<2	<10

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COMMERCE, CA

(Concentration, μg/L)

Well	Date	SWE	DTW	PT	E-WATER	TPHg	TPHd	Benzene	Toluene	E-Benzene	Xylenes	MTBE	MTBE (8260)	ETBE	DIPE	TAME	T-Butyl Alcohol
MW-12	4/4/2005	146.77	87.38	0.00	59.39	1160	<500	12.4	131	26.6	208	--	23.0	<2	<2	<2	<10
MW-12	7/5/2005	146.77	87.37	0.00	59.40	319	<500	35.2	36.0	13.4	63.3	--	16.7	<2	<2	<2	<10
MW-12	10/10/2005	146.77	87.07	0.00	59.70	57.9	<500	<1	<1	<1	<2	--	5.2	<2	<2	<2	<10
MW-12		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

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ETBE - Ethyl tertiary-butyl ether.
TBA - T-butyl alcohol.
LPH - Liquid-Phase Hydrocarbons.
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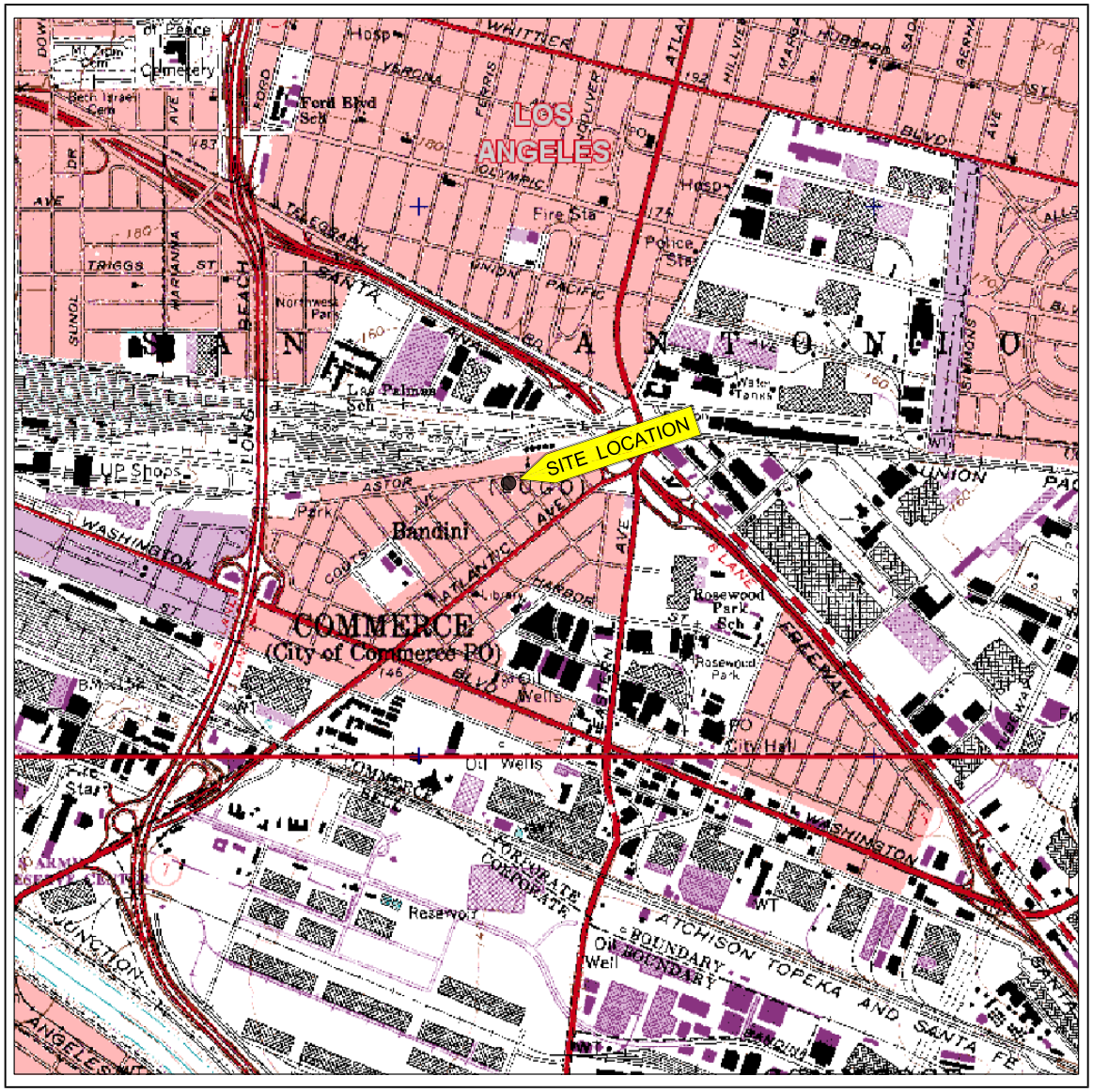
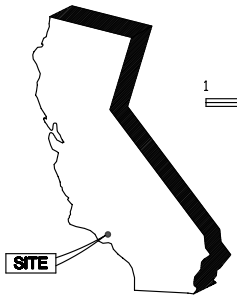
FIGURES



SOURCE: USGS 7.5 minute topo map, Los Angeles Quadrangle 1964, Photorevised 1994, 3–D TopoQuads, Delorme, 1999



SCALE 1:24000

1 1/2 0 1 MILE

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 .5 0 1 KILOMETER

CONTOUR INTERVAL 5 FEET
NATIONAL GEODETIC VERTICAL DATUM OF 1929

NORTH

ATLAS ENVIRONMENTAL ENGINEERING, INC.
15701 CHEMICAL LANE
HUNTINGTON BEACH, CA 92649
PHONE: (714) 890–7129

* Environmental Products and Services * Site Assessment and Remediation
* Air/Water/Soil Permitting and Monitoring * Hazardous Waste Management

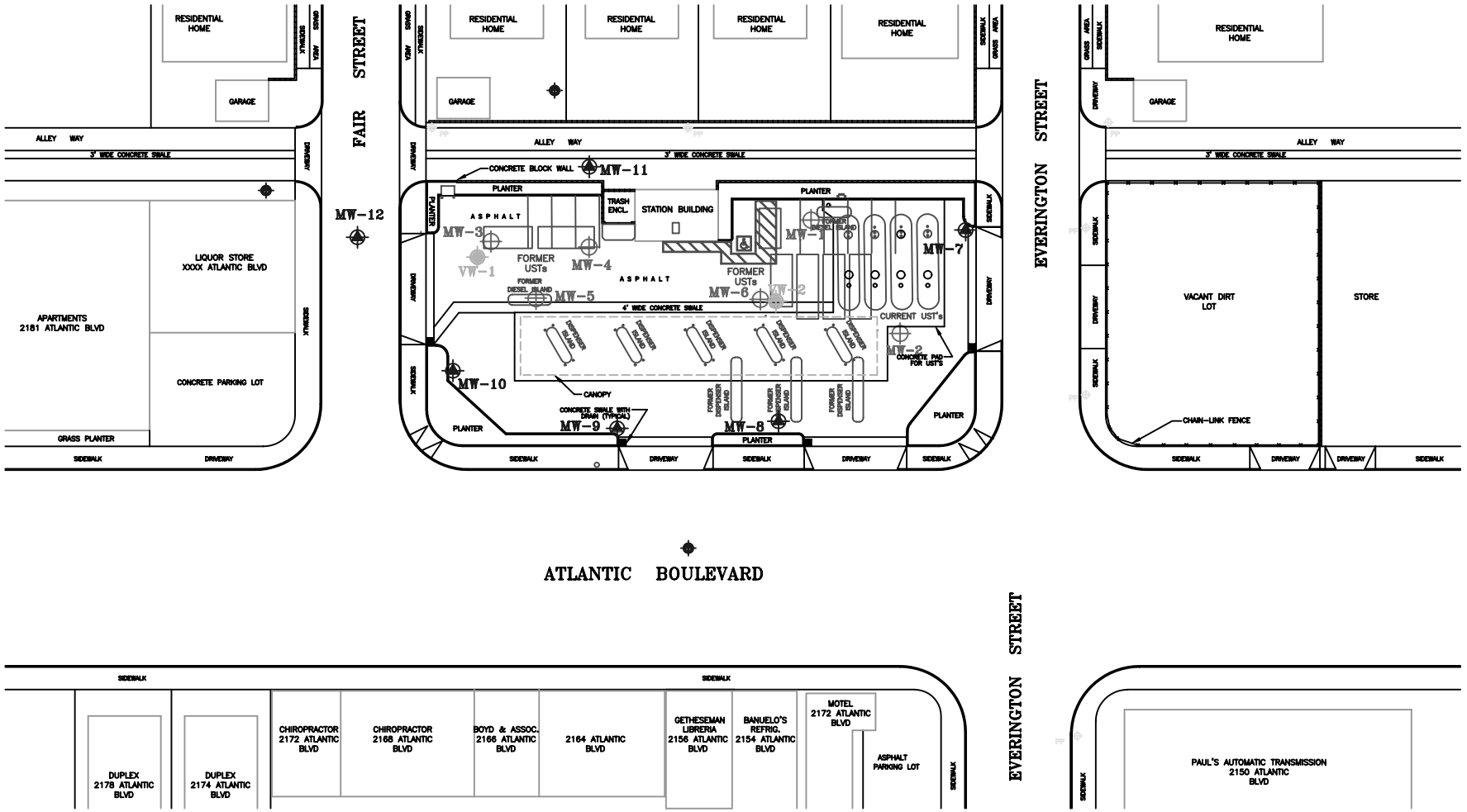
G&M OIL COMPANY, INC.
SERVICE STATION #51

2155 SOUTH ATLANTIC BOULEVARD
COMMERCE, CALIFORNIA

SITE LOCATION MAP

DRAWING NUMBER: GM51SLMF1

FIGURE 1



LEGEND:

- VW-2 DUAL-COMPLETEION WELL
- MW-6 GROUNDWATER MONITORING WELL
- GROUNDWATER MONITORING WELL, MAY 2004
- CONTINGENCY WELL

Design By: Adapted from RFA provided Site Map

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HUNTINGTON BEACH, CA 92649
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* Environmental Products and Services * Site Assessment and Remediation
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NORTH

Drawn By: S.P.
Date: 11/11/2002
Rev.: 11/11/2002

0 SCALE 60'
(APPROXIMATE DIMENSIONS)

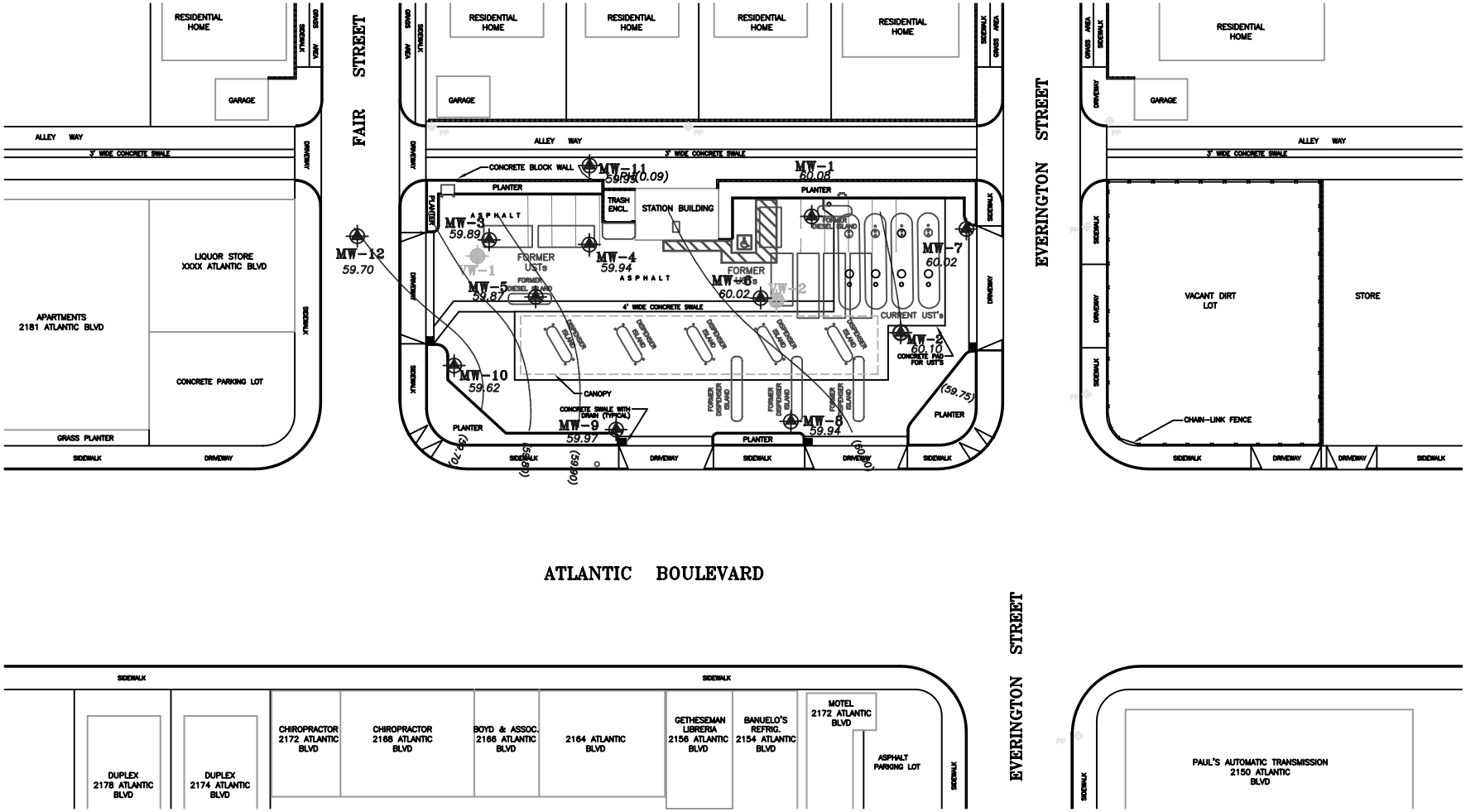
G & M OIL COMPANY
SERVICE STATION #51
2155 S. ATLANTIC BOULEVARD
COMMERCE, CA 90040

SITE VICINTY
WELL LOCATIONS

DRAWING NUMBER: G51ASI2F3

FIGURE 2

1 1



LEGEND:

VW-2 DUAL-COMPLETEION WELL

MW-12 GROUNDWATER MONITORING WELL

60.15 GROUNDWATER ELEVATION, 10/10/2005

LPH(0.09) LIQUID PHASE HYDROCARBON (APPARENT THICKNESS IN FT)

GROUNDWATER CONTOUR

Design By: Adapted from RFA provided Site Map

Drawn By: S.P.
Date: 11/11/2002
Rev.: 1/10/2006

0 SCALE 60'
(APPROXIMATE DIMENSIONS)

ATLAS ENVIRONMENTAL ENGINEERING, INC.
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HUNTINGTON BEACH, CA 92649
PHONE: (714) 890-7129

* Environmental Products and Services * Site Assessment and Remediation
* Air/Water/Soil Permitting and Monitoring * Hazardous Waste Management

NORTH

G & M OIL COMPANY
SERVICE STATION #51

2155 S. ATLANTIC BOULEVARD
COMMERCE, CA 90040

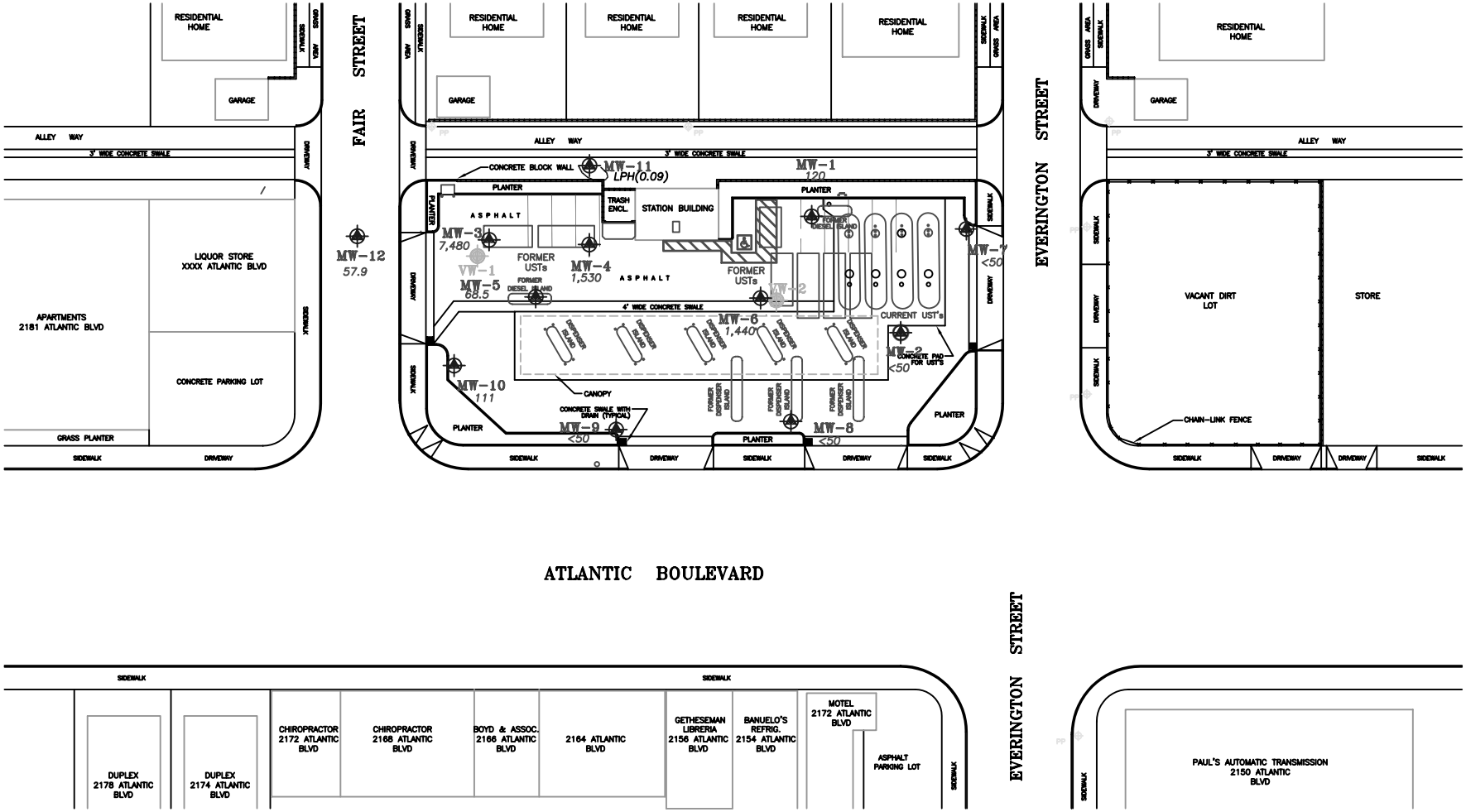
SITE VICINTY
GROUNDWATER CONTOUR MAP

DRAWING NUMBER: G51SCMQ405

FIGURE 3

1

1



LEGEND:

- VW-2 DUAL-COMPLETEION WELL
- MW-12 GROUNDWATER MONITORING WELL
- 7,480 TPHg CONCEN. (ppb), 10/10/2005
- <50 LESS THAN LAB DETECTION LIMIT
- LPH(0.09) LIQUID PHASE HYDROCARBON (APPARENT THICKNESS IN FT)

Design By: Adapted from RFA provided Site Map

Drawn By: S.P.
Date: 11/11/2002
Rev.: 1/10/2006

0 SCALE 60'
(APPROXIMATE DIMENSIONS)

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COMMERCE, CA 90040

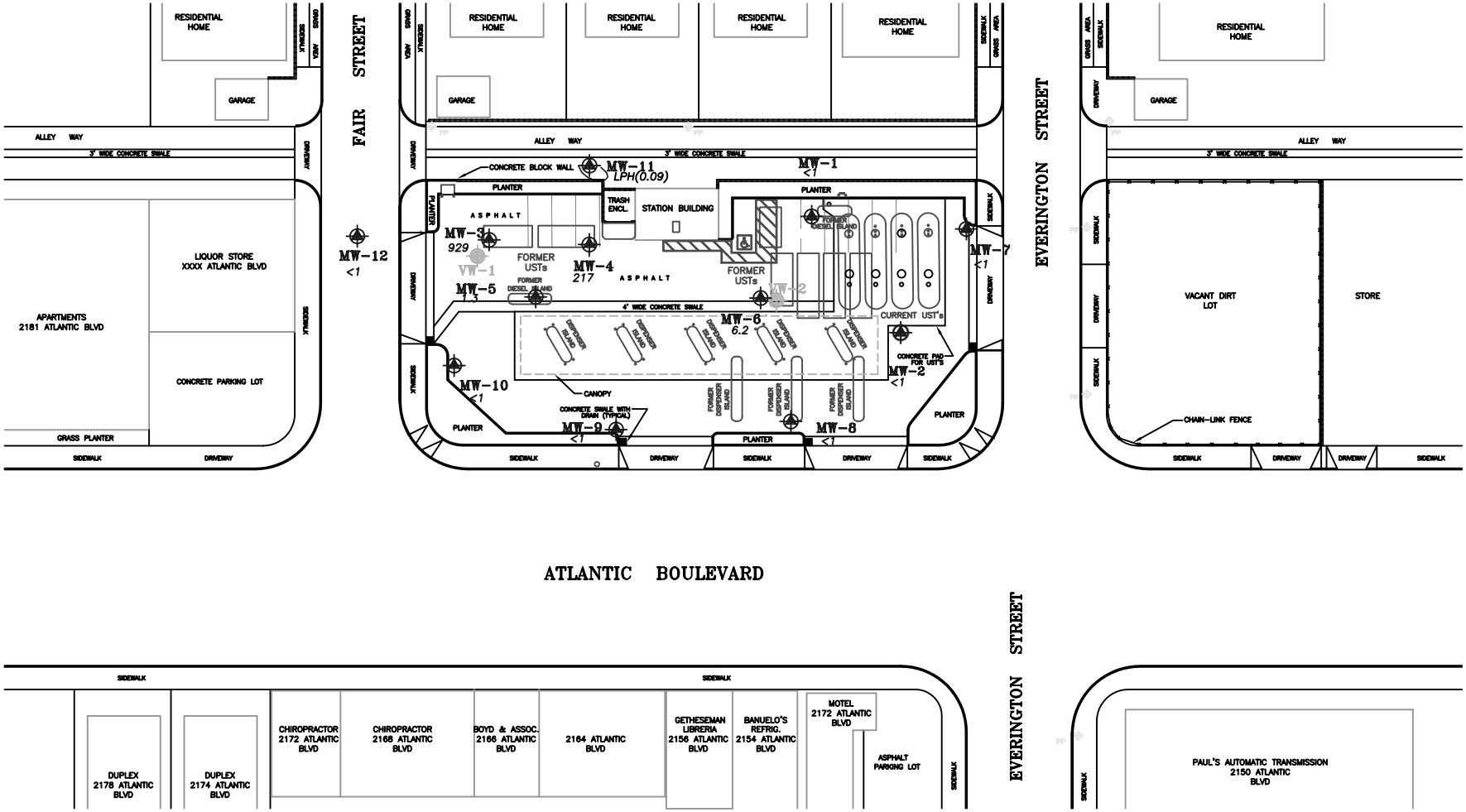
SITE VICINTY

TPHg CONCENTRATION IN GROUNDWATER

DRAWING NUMBER: G51SCMQ405

FIGURE 4

1 1



LEGEND:

- VW-2 DUAL-COMPLETEION WELL
- MW-12 GROUNDWATER MONITORING WELL
- 929 BENZENE CONCEN. (ppb), 10/10/2005
- <1 LESS THAN LAB DETECTION LIMIT
- LPH(0.09) LIQUID PHASE HYDROCARBON (APPARENT THICKNESS IN FT)

Design By: Adapted from RFA provided Site Map

Drawn By: S.P.
Date: 11/11/2002
Rev.: 1/10/2006

0 SCALE 60'
(APPROXIMATE DIMENSIONS)

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COMMERCE, CA 90040

SITE VICINTY

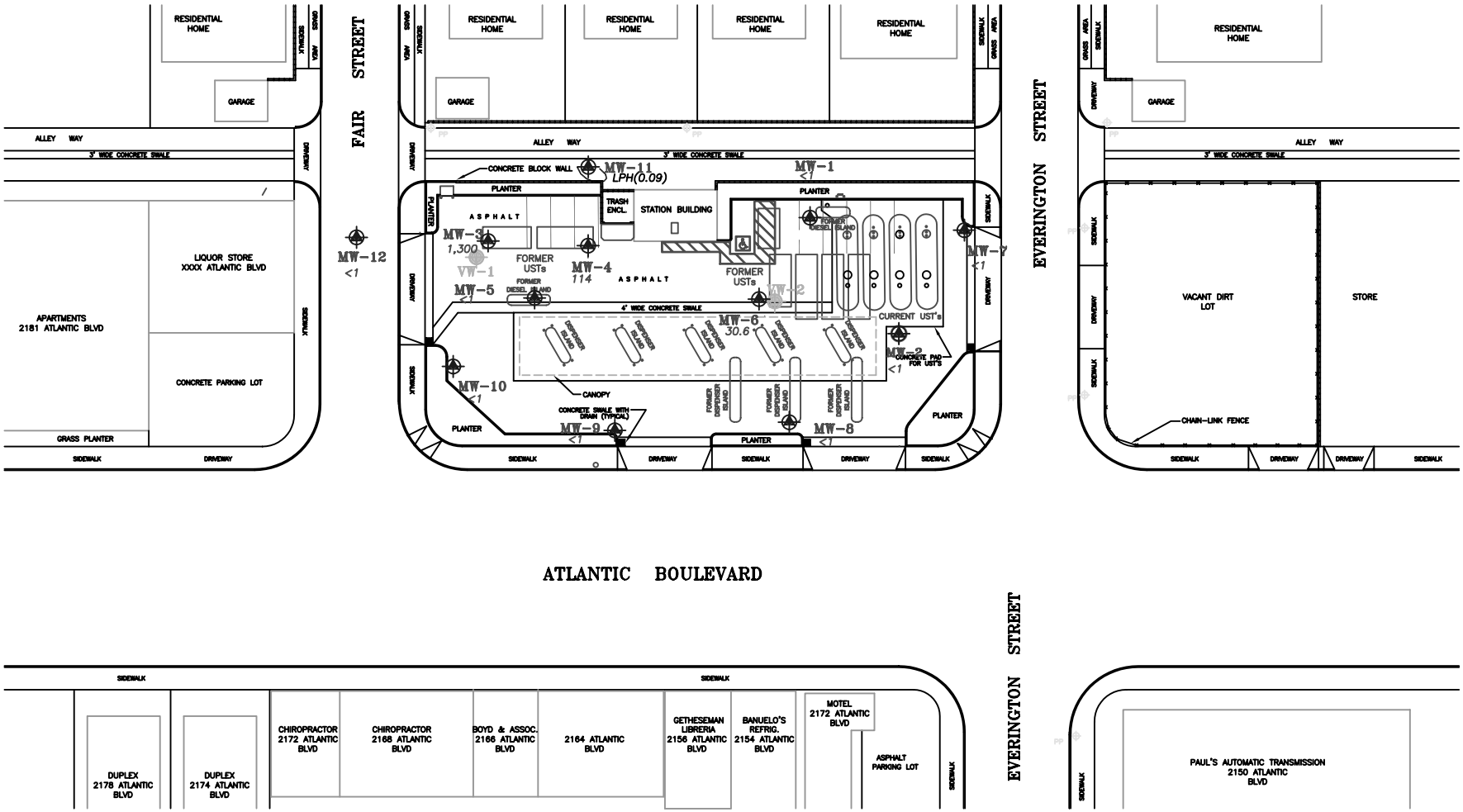
BENZENE CONCENTRATION IN GROUNDWATER

DRAWING NUMBER: G51SCMQ405

FIGURE 5

1

1



LEGEND:

- VW-2 — DUAL-COMPLETEION WELL
- MW-12 — GROUNDWATER MONITORING WELL
- <1 — LESS THAN LAB LIMIT
- 1,300 — TOLUENE CONCEN. (ppb), 10/10/2005
- LPH(0.09) — LIQUID PHASE HYDROCARBON (APPARENT THICKNESS IN FT)
- LPH CONTOUR

Design By: Adapted from RFA provided Site Map

Drawn By: S.P.
Date: 11/11/2002
Rev.: 1/10/2006

0 SCALE 60'
(APPROXIMATE DIMENSIONS)

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COMMERCE, CA 90040

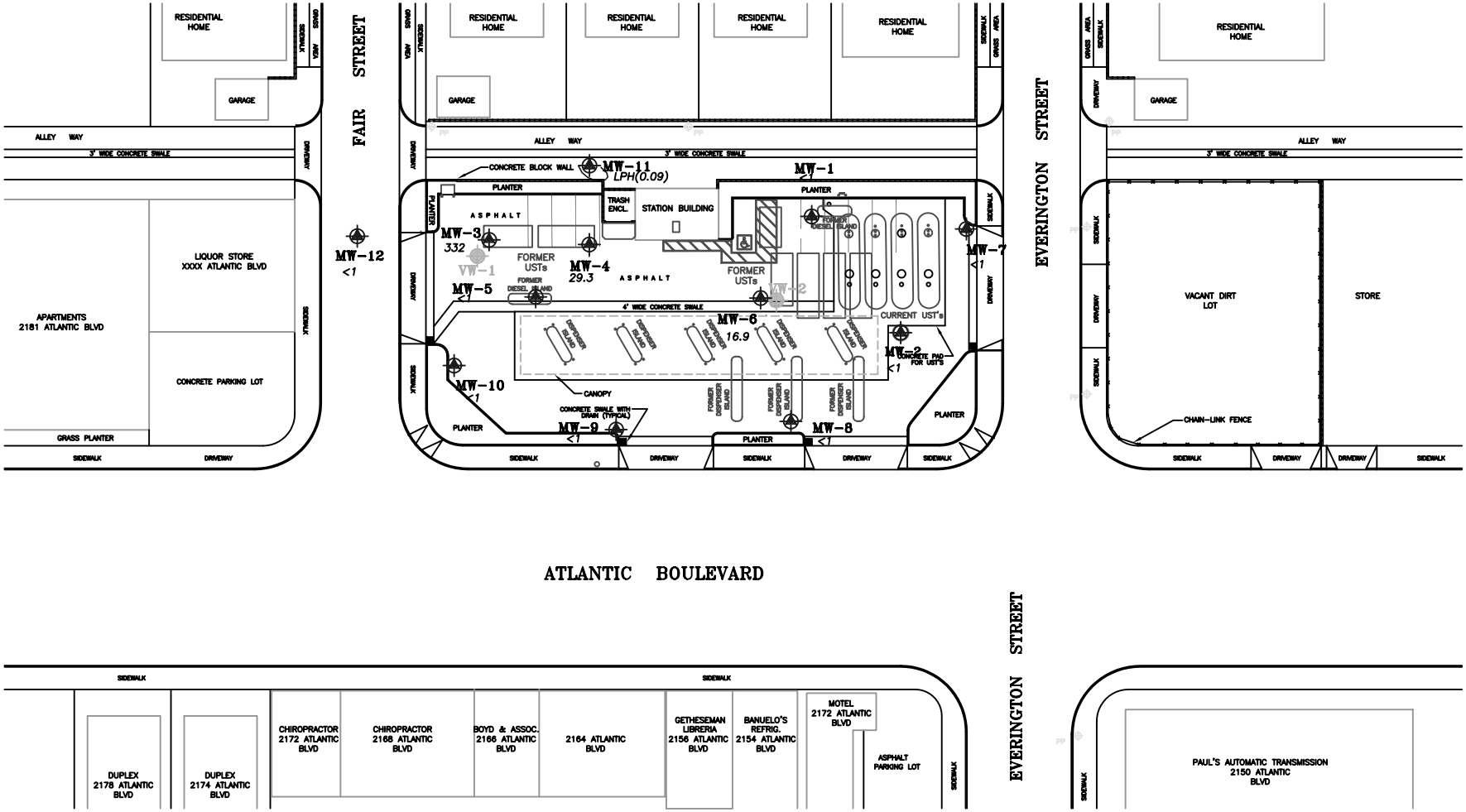
SITE VICINTY

TOLUENE CONCENTRATION IN GROUNDWATER

DRAWING NUMBER: G51SCMQ405

FIGURE 6

1 1



LEGEND:

- VW-2 — DUAL-COMPLETEION WELL
- MW-12 — GROUNDWATER MONITORING WELL
- <1 — LESS THAN LAB LIMIT
- 332 — E-BENZENE CONCEN. (ppb), 10/10/2005
- LPH(0.09) — LIQUID PHASE HYDROCARBON (APPARENT THICKNESS IN FT)
- LPH CONTOUR

Design By: Adapted from RFA provided Site Map

Drawn By: S.P.
Date: 11/11/2002
Rev.: 1/10/2006

0 SCALE 60'
(APPROXIMATE DIMENSIONS)

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COMMERCE, CA 90040

SITE VICINTY

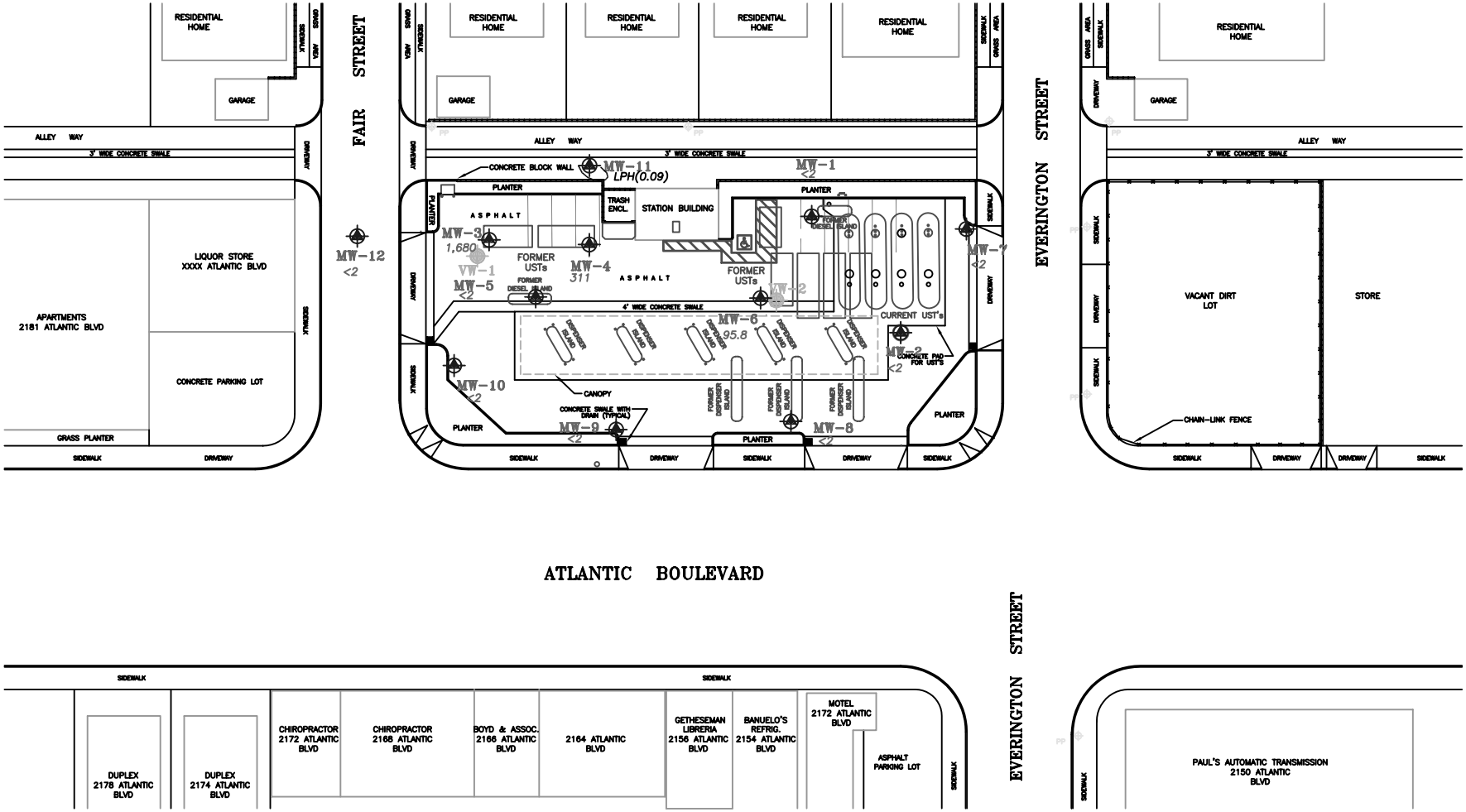
E-BENZENE CONCENTRATION IN GROUNDWATER

DRAWING NUMBER: G51SCMQ405

FIGURE 7

1

1



LEGEND:

- VW-2 DUAL-COMPLETEION WELL
- MW-12 GROUNDWATER MONITORING WELL
- <2 LESS THAN LAB LIMIT
- 1,680 XYLENES CONCEN. (ppb), 10/10/2005
- LPH(0.09) LIQUID PHASE HYDROCARBON (APPARENT THICKNESS IN FT)

Design By: Adapted from RFA provided Site Map

Drawn By: S.P.
Date: 11/11/2002
Rev.: 1/10/2006

0 SCALE 60'
(APPROXIMATE DIMENSIONS)

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COMMERCE, CA 90040

SITE VICINTY

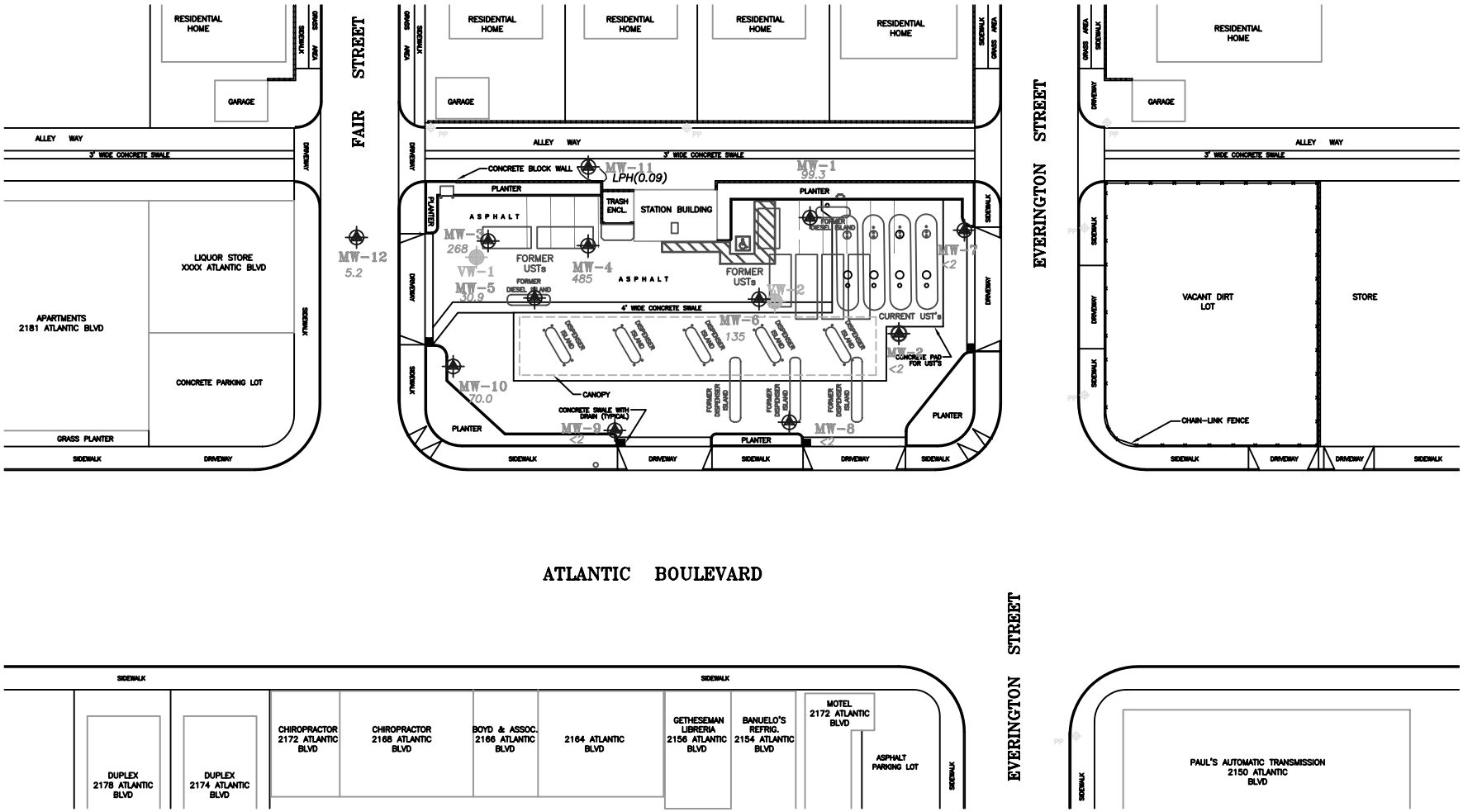
XYLENES CONCENTRATION IN GROUNDWATER

DRAWING NUMBER: G51SCMQ405

FIGURE 8

1

1



LEGEND:

- VW-2 — DUAL-COMPLETEION WELL
- MW-12 — GROUNDWATER MONITORING WELL
- <2 — LESS THAN LAB LIMIT
- 485 — MTBE CONCEN. BY EPA METHOD 8260B(ppb), 10/10/2005
- LPH(0.09) — LIQUID PHASE HYDROCARBON (APPARENT THICKNESS IN FT)

Design By: Adapted from RFA provided Site Map

Drawn By: S.P.
Date: 11/11/2002
Rev.: 1/10/2006

0 SCALE 60'
(APPROXIMATE DIMENSIONS)

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SERVICE STATION #51

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COMMERCE, CA 90040

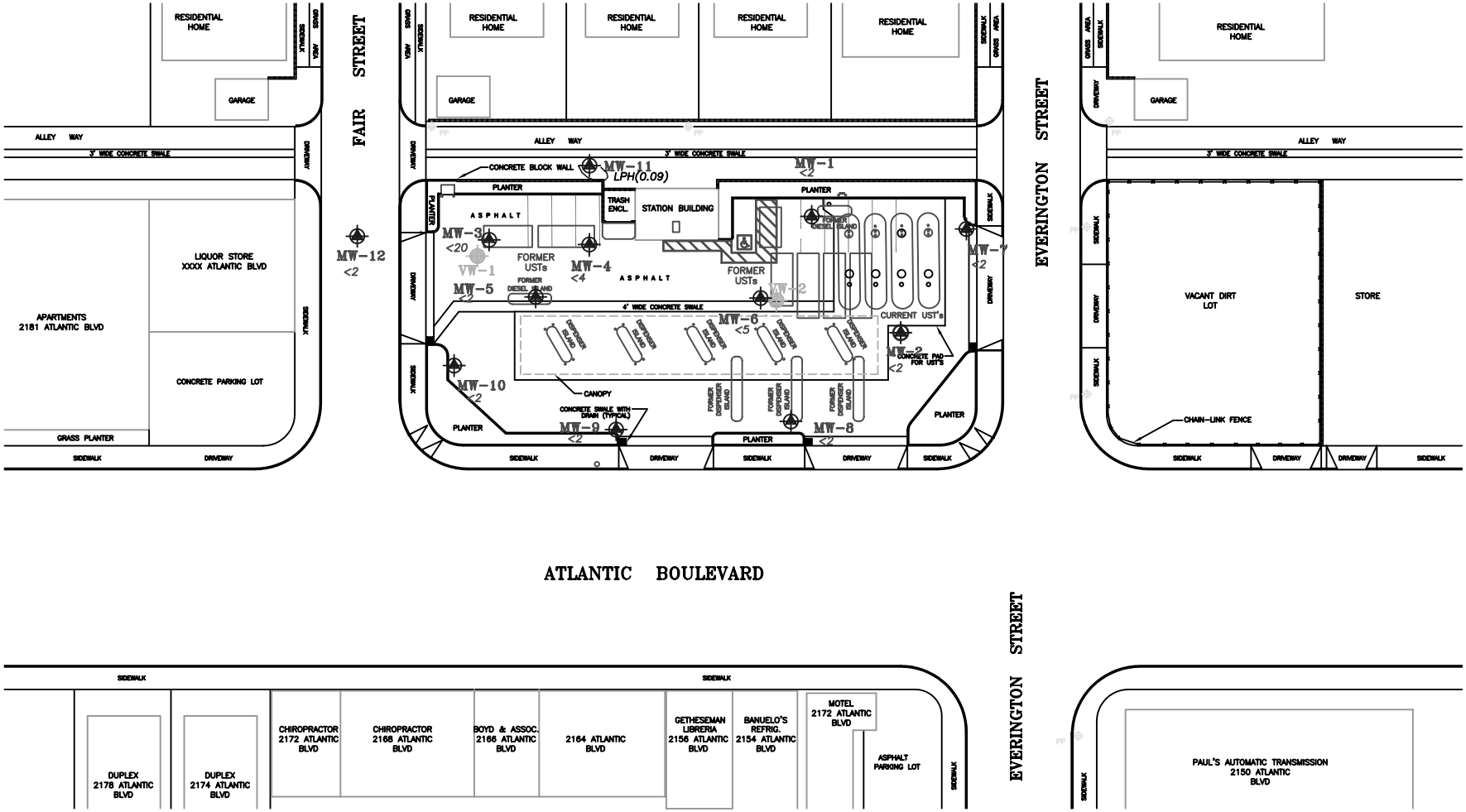
SITE VICINTY

MTBE CONCENTRATION IN GROUNDWATER

DRAWING NUMBER: G51SCMQ405

FIGURE 9

1 1



LEGEND:

- VW-2 DUAL-COMPLETEION WELL
- MW-12 GROUNDWATER MONITORING WELL
- <2 LESS THAN LAB LIMIT
- <20 ETBE CONCEN. (ppb), 10/10/2005
- LPH(0.09) LIQUID PHASE HYDROCARBON (APPARENT THICKNESS IN FT)

Design By: Adapted from RFA provided Site Map

Drawn By: S.P.
Date: 11/11/2002
Rev.: 1/10/2006

0 SCALE 60'
(APPROXIMATE DIMENSIONS)

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SERVICE STATION #51

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COMMERCE, CA 90040

SITE VICINTY

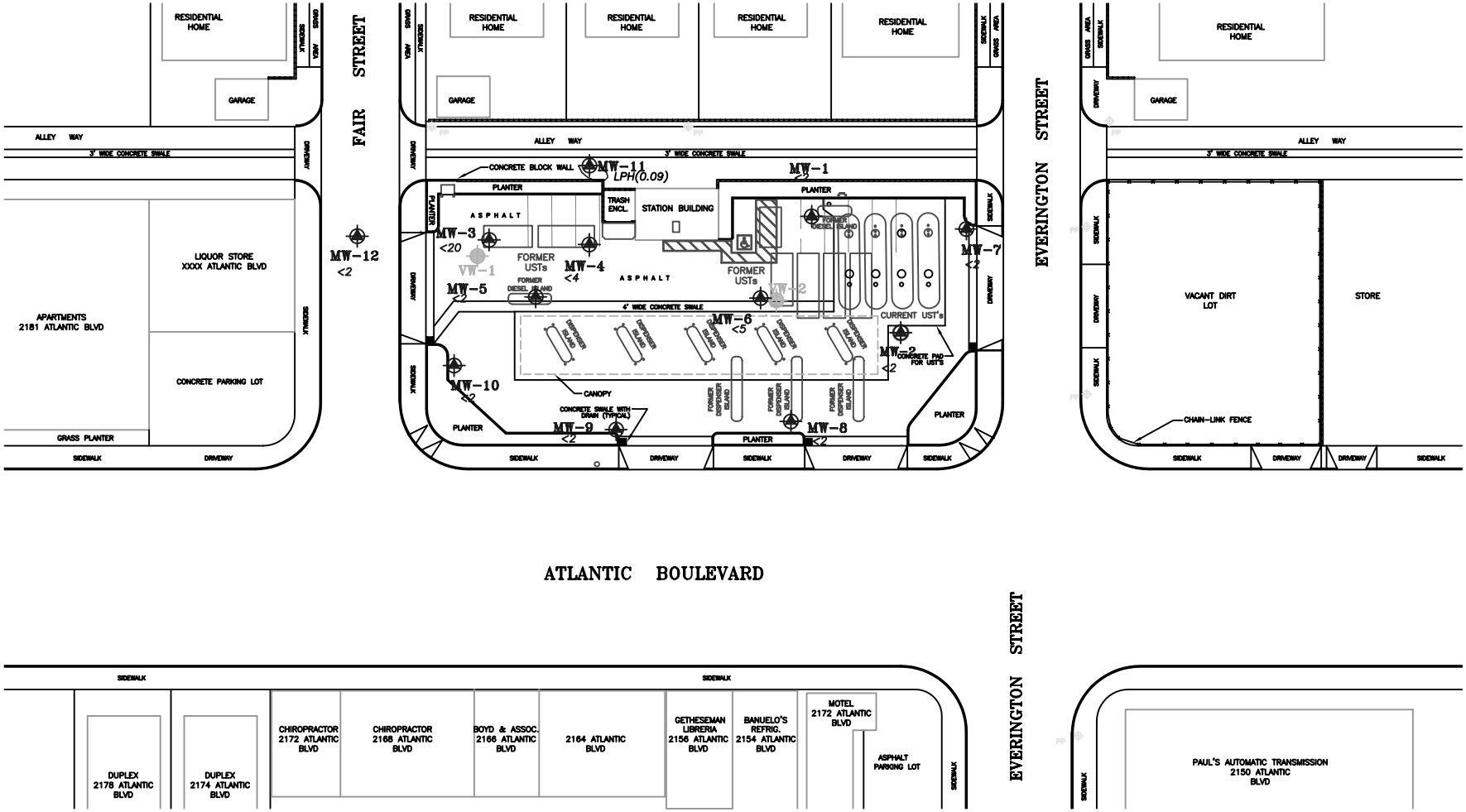
ETBE CONCENTRATION IN GROUNDWATER

DRAWING NUMBER: G51SCMQ405

FIGURE 10

1

1



LEGEND:

- VW-2 DUAL-COMPLETEION WELL
- MW-12 GROUNDWATER MONITORING WELL
- <2 LESS THAN LAB LIMIT
- <20 DIPE CONCEN. (ppb), 10/10/2005
- LPH(0.09) LIQUID PHASE HYDROCARBON (APPARENT THICKNESS IN FT)

Design By: Adapted from RFA provided Site Map

Drawn By: S.P.
Date: 11/11/2002
Rev.: 1/10/2006

0 SCALE 60'
(APPROXIMATE DIMENSIONS)

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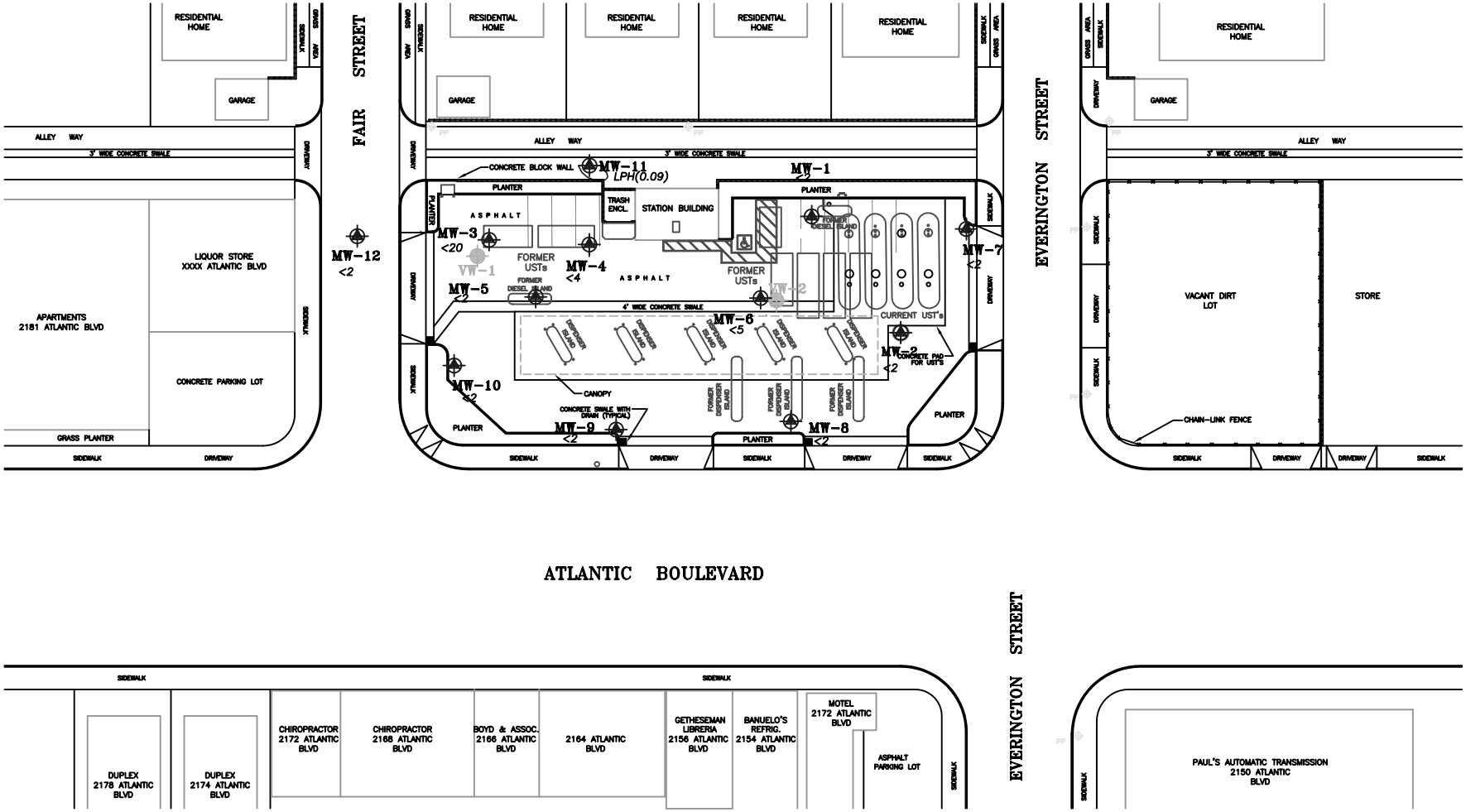
SERVICE STATION #51
2155 S. ATLANTIC BOULEVARD
COMMERCE, CA 90040

SITE VICINTY
DIPE CONCENTRATION IN GROUNDWATER

DRAWING NUMBER: G51SCMQ405

FIGURE 11

1 1



LEGEND:

- VW-2 — DUAL-COMPLETEION WELL
- MW-12 — GROUNDWATER MONITORING WELL
- <2 — LESS THAN LAB LIMIT
- <20 — TAME CONCEN. (ppb), 10/10/2005
- LPH(0.09) — LIQUID PHASE HYDROCARBON (APPARENT THICKNESS IN FT)

Design By: Adapted from RFA provided Site Map

Drawn By: S.P.
Date: 11/11/2002
Rev.: 1/10/2006

SCALE 0 60' (APPROXIMATE DIMENSIONS)

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COMMERCE, CA 90040

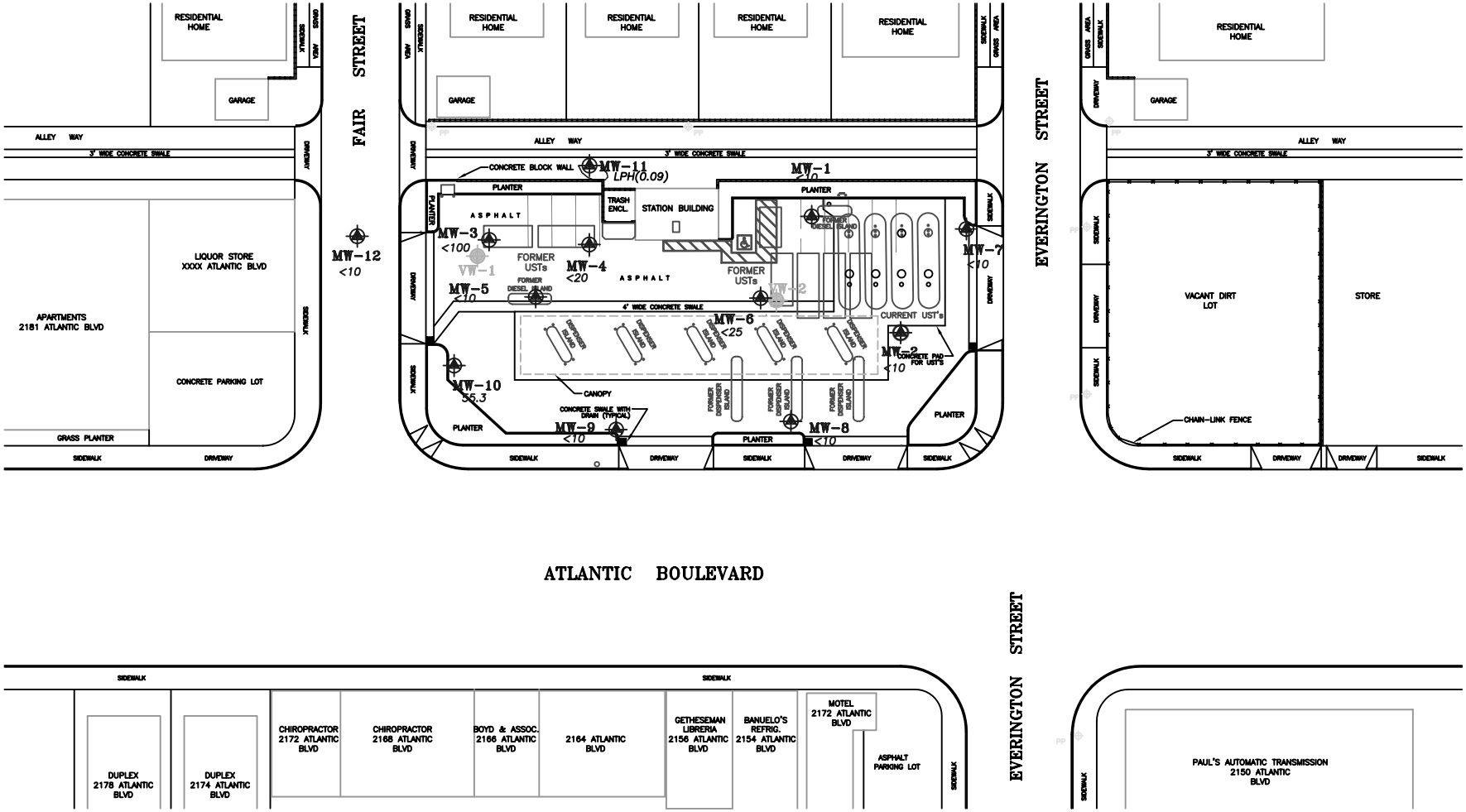
SITE VICINTY

TAME CONCENTRATION IN GROUNDWATER

DRAWING NUMBER: G51SCMQ405

FIGURE 12

1 1



LEGEND:

- VW-2 DUAL-COMPLETEION WELL
- MW-12 GROUNDWATER MONITORING WELL
- <10 LESS THAN LAB LIMIT
- 55.3 TBA CONCEN. (ppb), 10/10/2005
- LPH(0.09) LIQUID PHASE HYDROCARBON (APPARENT THICKNESS IN FT)

Design By: Adapted from RFA provided Site Map

Drawn By: S.P.
Date: 11/11/2002
Rev.: 1/10/2006

0 SCALE 60'
(APPROXIMATE DIMENSIONS)

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2155 S. ATLANTIC BOULEVARD
COMMERCE, CA 90040

SITE VICINTY

TBA CONCENTRATION IN GROUNDWATER

DRAWING NUMBER: G51SCMQ405

FIGURE 13

1 1

Fig. 14
Field Data and Model Predicted Time Vs. MTBE Concentration Profile for Down-Gradient MW-3

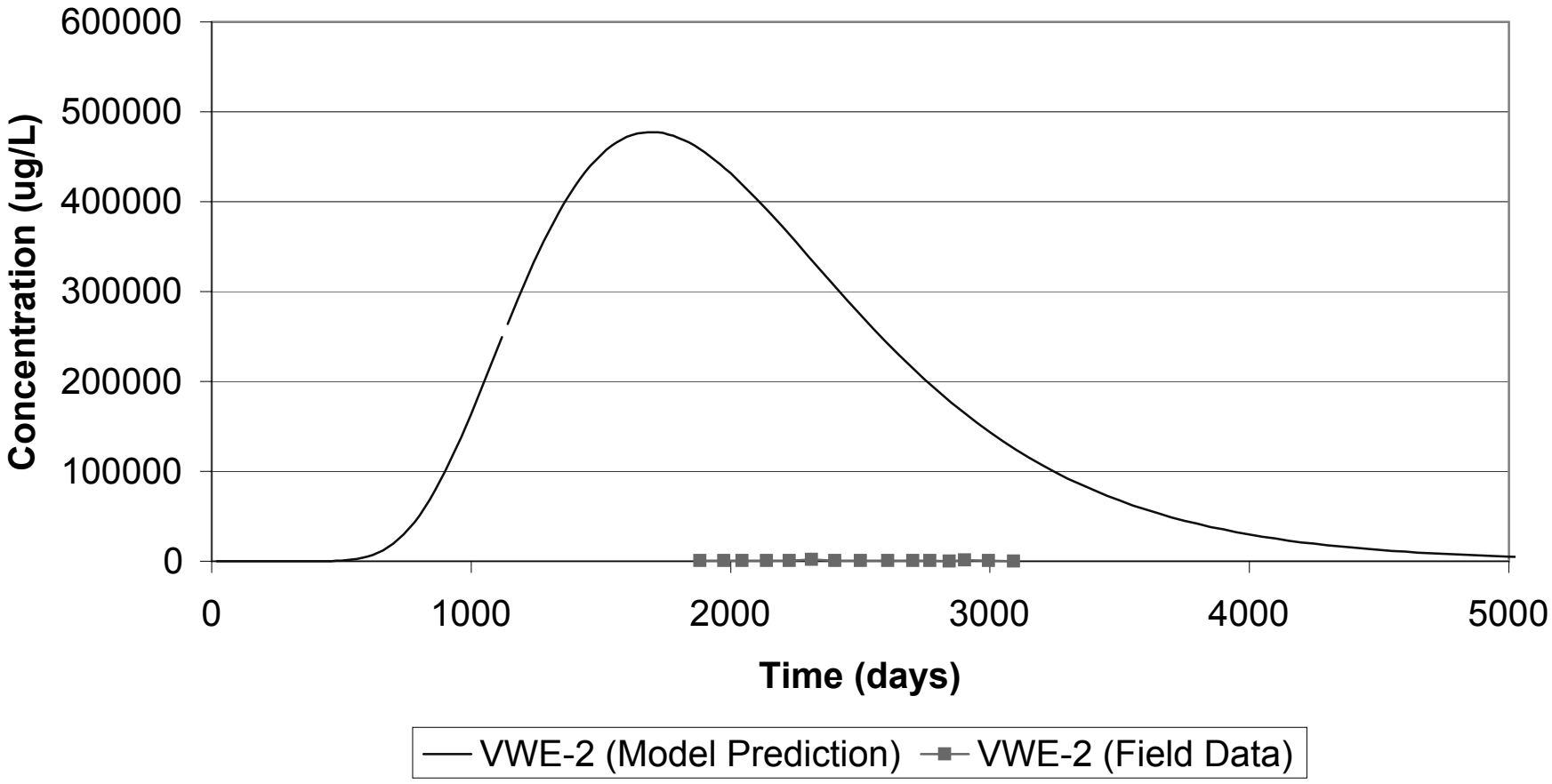


Fig. 15
Field Data and Model Predicted Time Vs. MTBE Concentration Profile for Down-Gradient MW-12

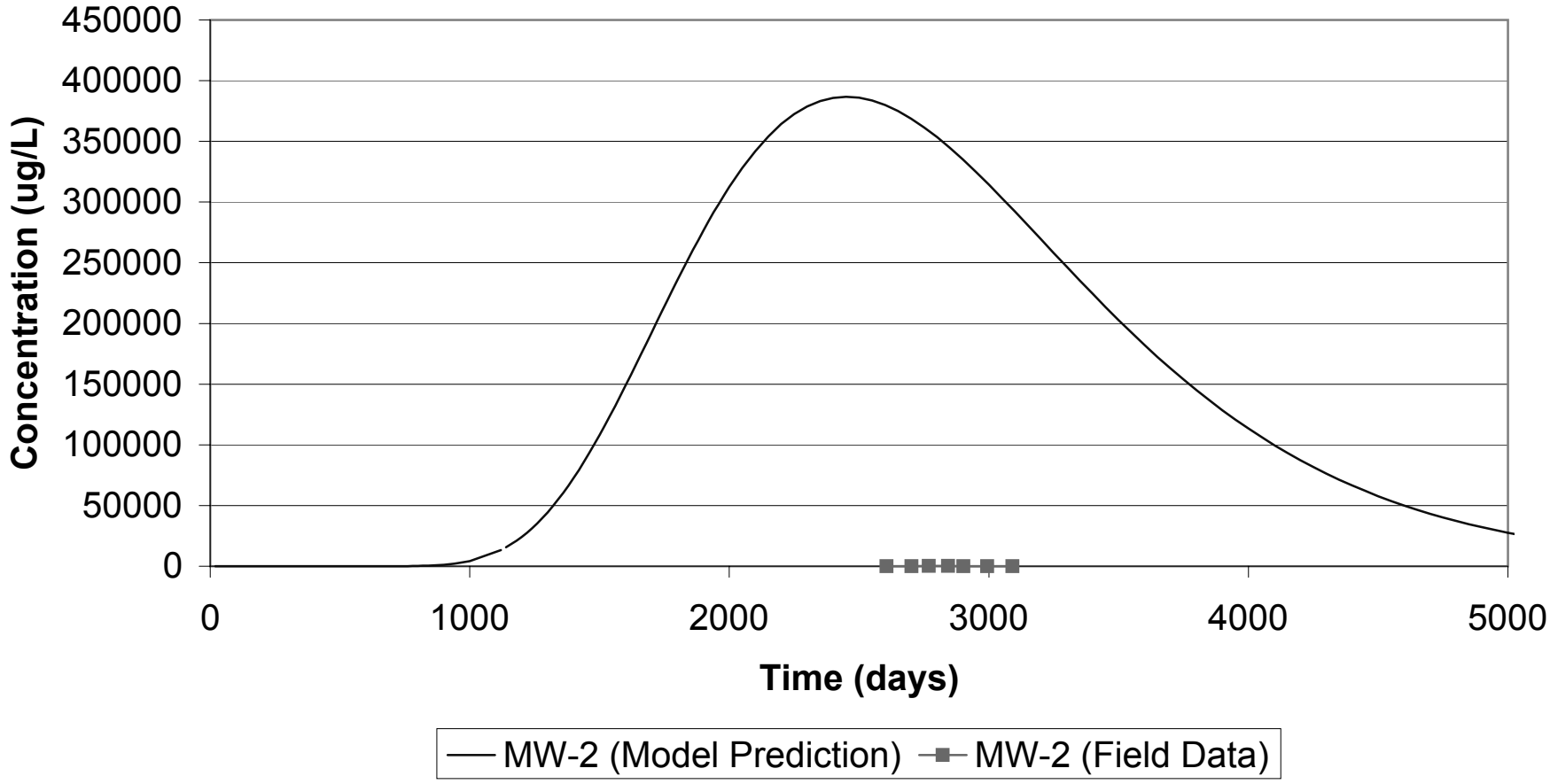
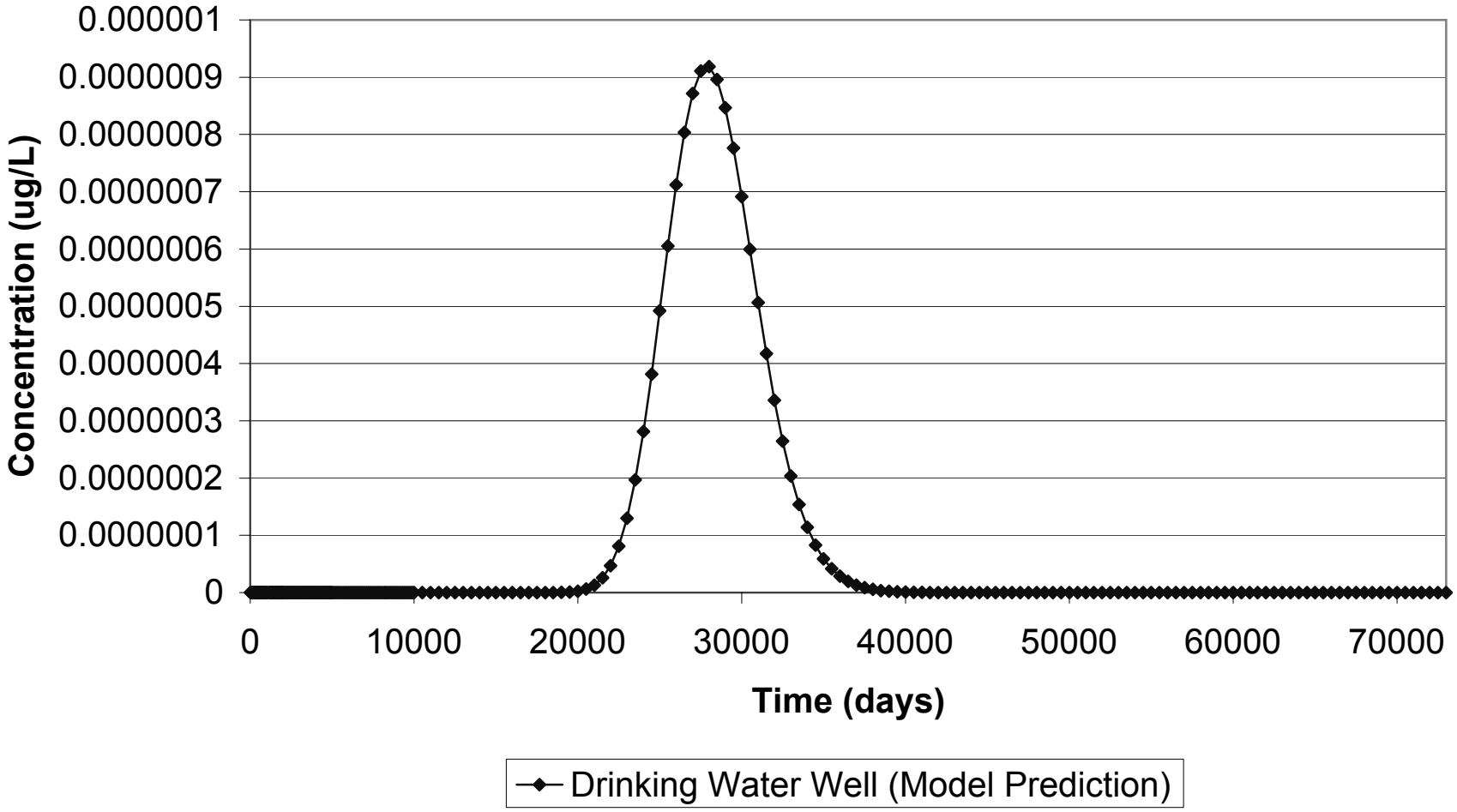


Fig. 16
Model Predicted Time Vs. MTBE Concentration Profile for Drinking Water Well



APPENDIX A

G&M OIL COMPANY STATION #51
QUARTERLY STATUS REPORT
4TH QUARTER 2005

SITE LOCATION:	2155 S. Atlantic Blvd., Commerce, CA 90040
OWNER/OPERATOR:	G&M Oil Co., 16868 "A" Street, Huntington Beach, CA 92647
CONTACT:	Ms. Jennifer Talbert
LEAD AGENCY:	Los Angeles Regional Water Quality Control Board
AGENCY CONTACT:	Mr. Arman Toumari

Site Activities this Quarter

- Quarterly groundwater monitoring and sampling was performed on October 10, 2005. Approx. 564 gal. of groundwater purged prior to sampling wells. Purge water removed utilizing a vacuum truck.
- Additional analytical data presented in **Table 2**.

Future Site Activities

- ATLAS anticipates to continue quarterly groundwater monitoring, sampling and reporting for 1st Quarter 2006.

Quarterly Summary

Total GW Monitoring Wells:		12	
GW Wells Gauged:		12	
GW Wells Sampled:		12	
Wells with Liquid Phase Hydrocarbons(LPH):		0	
Gallons of LPH Removed this Quarter:		0	
Gallons of LPH Removed to Date:		4.75	
Depth to Groundwater (feet):		87.07	to 88.76
Groundwater Elevation (feet):		59.62	to 60.15
Approximate Groundwater Gradient(ft/ft)		0.002	
Approximate Groundwater Flow Direction:		Southwesterly	
Consistent with Last Quarter:		Yes	

Analytical Summary

TPHd Concentrations	(μ g/L):	<500	
TPHg Concentrations	(μ g/L):	<50	to 7,480
Benzene Concentrations	(μ g/L):	<1	to 929
Toluene Concentrations	(μ g/L):	<1	to 1,300
Ethylbenzene Concentrations	(μ g/L):	<1	to 332
Total Xylenes Concentrations	(μ g/L):	<2	to 1,680
MTBE (EPA 8260) Concentrations	(μ g/L):	<2	to 485
ETBE Concentrations	(μ g/L):	<2	to <20
DIPE Concentrations	(μ g/L):	<2	to <20
TAME Concentrations	(μ g/L):	<2	to <20
TBA Concentrations	(μ g/L):	<10	to 55.3

ATLAS ENVIRONMENTAL ENGINEERING, INC.
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HUNTINGTON BEACH, CA 92649
(714) 890 - 7129

PROJECT STATUS REPORT

G&M OIL COMPANY S.S. #51

2155 S. ATLANTIC BOULEVARD

COMMERCE, CA 90040

AE JOB NO./INV.: G51-Q405

DATE: OCTOBER 10, 2005

OBSERVATION WELLS

NO.	DTW	DTP	PT	GALLONS	DTB	DIA.	ELEVATION			ODORS			F/P	
QUARTERLY			FEET	REMOVED	FEET	INCH.	CDTW	SWE	E-WAT	YES	NO	SLIGHT	YES	NO
MW-1	88.13			57.00	109.75	4.00	88.13	148.21	60.08	-	X	-	-	X
MW-2	87.97			53.00	108.10	4.00	87.97	148.07	60.10	-	X	-	-	X
MW-3	88.00			55.00	108.88	4.00	88.00	147.89	59.89	-	X	-	-	X
MW-4	88.64			49.00	107.12	4.00	88.64	148.58	59.94	-	X	-	-	X
MW-5	87.58			52.00	107.28	4.00	87.58	147.45	59.87	-	X	-	-	X
MW-6	88.12			48.00	106.36	4.00	88.12	148.14	60.02	-	X	-	-	X
MW-7	87.57			49.00	106.34	4.00	87.57	147.72	60.15	-	X	-	-	X
MW-8	87.82			32.00	99.82	4.00	87.82	147.76	59.94	-	X	-	-	X
MW-9	87.67			48.00	105.86	4.00	87.67	147.64	59.97	-	X	-	-	X
MW-10	87.88			54.00	108.33	4.00	87.88	147.50	59.62	-	X	-	-	X
MW-11	88.76	88.67	0.09	25.00	106.44	4.00	88.69	148.68	59.99	-	X	-	-	X
MW-12	87.07			52.00	106.68	4.00	87.07	146.77	59.70	-	X	-	-	X

EXPLANATION

DTW - DEPTH TO WATER FROM SURFACE
DTP - DEPTH TO PRODUCT FROM SURFACE
PT - PRODUCT THICKNESS
MEASUREMENTS IN FEET
DTB - DEPTH TO BOTTOM
DIA - WELL DIAMETER
SWE - SURVEYED WELL HEAD ELEVATION
E-WAT - ELEVATION OF WATER
F/P - FREE PRODUCT
CDTW - CORRECTED DEPTH TO WATER FOR PRESENCE OF FREE PRODUCT (USING SPECIFIC GRAVITY OF 0.755)

REMARKS

QUARTERLY SAMPLING

THE REMOVED PRODUCT AND/OR PRODUCT/GROUNDWATER MIXTURE WAS REMOVED USING A VACUUM TRUCK WITH A STORAGE TANK, FOR PROPER DISPOSAL BY GENERATOR.

FREE PRODUCT REMOVED: APPROX. 0.25 GALLONS TOTAL TO DATE: 5.00 GALLONS
GROUNDWATER(*) REMOVED: APPROX. 563.75 GALLONS TOTAL TO DATE: 6300.00 GALLONS

(*) PRODUCT/GROUNDWATER MIXTURE/DECON. WATER

55 GALLON DRUM: PROD. _____ GALLONS _____ DIA _____ DTW _____
WATER _____ GALLONS _____ TD _____ DTP _____

DATA RECORDED BY: FELIX VELASQUEZ/ ROGER GONZALEZ INPUT BY: KB

FIELD DATA - GROUNDWATER WELL SAMPLING PROGRAM

SITE/JOB	*G&M OIL STATION #51*	DATE	*10/10/2005*
ADDRESS	*2155 S. ATLANTIC BLVD., COMMERCE, CA 90040*		
PERSONNEL	*FELIX/ROGER*	WEATHER	*SUNNY*
WELL NO.	*MW-1*	EQUIPMENT	*VACUUM TRUCK*

Before Purging

Total Well Depth	*109.75*	Ft.	Well Diameter	*4.00*	Inch.
Depth to Water	*88.13*	Ft.	Est. Purge Vol.	*56.47*	Gal.

Sampling Data

Initial Turbidity	*70.00*				Final Turbidity	*8.16*	
D.O.	3.80	ppm			ORP	106.00	mV
Time (MT)	*750*	*757*	*805*	*813*	*829*		
EC	*1669*	*1452*	*1428*	*1428*	*1423*		
pH	*7.90*	*8.01*	*8.05*	*8.02*	*8.02*		
Temp. (°F)	*67.6*	*67.3*	*66.3*	*66.3*	*67.1*		
(°C)	*19.8*	*19.6*	*19.05*	*19.04*	*19.50*		
Gal.	*10.00*	*20.00*	*30.00*	*40.00*	*57.00*		
Time (MT)							
EC							
pH							
Temp. (°F)							
(°C)							
Gal.							

After Purging/Before Sample Collection

Depth to Water	*91.36*	Ft.	Total Well Depth	*109.75*	Ft.

FIELD DATA - GROUNDWATER WELL SAMPLING PROGRAM

SITE/JOB	*G&M OIL STATION #51*	DATE	*10/10/2005*
ADDRESS	*2155 S. ATLANTIC BLVD., COMMERCE, CA 90040*		
PERSONNEL	*FELIX/ROGER*	WEATHER	*SUNNY*
WELL NO.	*MW-2*	EQUIPMENT	*VACUUM TRUCK*

Before Purging

Total Well Depth	*108.10*	Ft.	Well Diameter	*4.00*	Inch.
Depth to Water	*87.97*	Ft.	Est. Purge Vol.	*52.58*	Gal.

Sampling Data

Initial Turbidity	*90.20*			Final Turbidity	*3.29*	
D.O.	2.40	ppm		ORP	69.00	mV

Time (MT)	*904*	*910*	*916*	*922*	*928*	*935*
EC	*1189*	*1190*	*1198*	*1232*	*1205*	*1225*
pH	*7.86*	*7.88*	*7.85*	*7.70*	*7.73*	*7.73*
Temp. (°F)	*76.8*	*15.4*	*74.1*	*71.8*	*73.0*	*72.3*
(°C)	*24.9*	*23.9*	*23.4*	*22.1*	*22.8*	*22.4*
Gal.	*9.00*	*18.00*	*27.00*	*36.00*	*45.00*	*53.00*
Time (MT)						
EC						
pH						
Temp. (°F)						
(°C)						
Gal.						

After Purging/Before Sample Collection

Depth to Water	*90.26*	Ft.	Total Well Depth	*108.10*	Ft.

FIELD DATA - GROUNDWATER WELL SAMPLING PROGRAM

SITE/JOB	*G&M OIL STATION #51*	DATE	*10/10/2005*
ADDRESS	*2155 S. ATLANTIC BLVD., COMMERCE, CA 90040*		
PERSONNEL	*FELIX/ROGER*	WEATHER	*SUNNY*
WELL NO.	*MW-3*	EQUIPMENT	*VACUUM TRUCK*

Before Purging

Total Well Depth	*108.88*	Ft.	Well Diameter	*4.00*	Inch.
Depth to Water	*88.00*	Ft.	Est. Purge Vol.	*54.54*	Gal.

Sampling Data

Initial Turbidity	*96.40*			Final Turbidity	*3.48*	
D.O.	2.40	ppm		ORP	66.00	mV

Time	(MT)	*1300*	*1306*	*1312*	*1318*	*1324*	*1332*
EC		*1294*	*1397*	*1423*	*1456*	*1502*	*1535*
pH		*7.83*	*7.76*	*7.73*	*7.69*	*7.65*	*7.65*
Temp.	(°F)	*79.3*	*15.4*	*77.5*	*77.5*	*75.92*	*74.5*
	(°C)	*26.3*	*25.9*	*25.3*	*25.3*	*24.4*	*23.6*
Gal.		*9.00*	*18.00*	*27.00*	*36.00*	*45.00*	*55.00*
Time	(MT)						
EC							
pH							
Temp.	(°F)						
	(°C)						
Gal.							

After Purging/Before Sample Collection

Depth to Water	*89.96*	Ft.	Total Well Depth	*108.88*	Ft.

FIELD DATA - GROUNDWATER WELL SAMPLING PROGRAM

SITE/JOB	*G&M OIL STATION #51*	DATE	*10/10/2005*
ADDRESS	*2155 S. ATLANTIC BLVD., COMMERCE, CA 90040*		
PERSONNEL	*FELIX/ROGER*	WEATHER	*SUNNY*
WELL NO.	*MW-4*	EQUIPMENT	*VACUUM TRUCK*

Before Purging

Total Well Depth	*107.12*	Ft.	Well Diameter	*4.00*	Inch.
Depth to Water	*88.64*	Ft.	Est. Purge Vol.	*48.27*	Gal.

Sampling Data

Initial Turbidity	*86.60*				Final Turbidity	*3.88*	
D.O.	2.60	ppm			ORP	28.70	mV
Time (MT)	*1340*	*1346*	*1352*	*1358*	*1408*		
EC	*1373*	*1364*	*1381*	*1384*	*1371*		
pH	*7.92*	*7.78*	*7.74*	*7.72*	*7.72*		
Temp. (°F)	*77.0*	*15.4*	*75.9*	*75.6*	*75.6*		
(°C)	*25.0*	*24.7*	*24.4*	*24.2*	*24.2*		
Gal.	*9.00*	*18.00*	*27.00*	*36.00*	*49.00*		
Time (MT)							
EC							
pH							
Temp. (°F)							
(°C)							
Gal.							

After Purging/Before Sample Collection

Depth to Water	*90.49*	Ft.	Total Well Depth	*107.12*	Ft.

FIELD DATA - GROUNDWATER WELL SAMPLING PROGRAM

SITE/JOB	*G&M OIL STATION #51*	DATE	*10/10/2005*
ADDRESS	*2155 S. ATLANTIC BLVD., COMMERCE, CA 90040*		
PERSONNEL	*FELIX/ROGER*	WEATHER	*SUNNY*
WELL NO.	*MW-5*	EQUIPMENT	*VACUUM TRUCK*

Before Purging

Total Well Depth	*107.28*	Ft.	Well Diameter	*4.00*	Inch.
Depth to Water	*87.58*	Ft.	Est. Purge Vol.	*51.46*	Gal.

Sampling Data

Initial Turbidity	*90.60*			Final Turbidity	*3.60*	
D.O.	3.40	ppm		ORP	76.00	mV

Time (MT)	*1415*	*1421*	*1427*	*1433*	*1440*	*1446*
EC	*1230*	*1178*	*1186*	*1195*	*1193*	*1199*
pH	*7.84*	*7.83*	*7.79*	*7.78*	*7.76*	*7.76*
Temp. (°F)	*77.5*	*15.4*	*77.7*	*77.0*	*77.2*	*76.3*
(°C)	*25.3*	*25.9*	*25.4*	*25.0*	*25.1*	*24.6*
Gal.	*9.00*	*18.00*	*27.00*	*36.00*	*45.00*	*52.00*
Time (MT)						
EC						
pH						
Temp. (°F)						
(°C)						
Gal.						

After Purging/Before Sample Collection

Depth to Water	*90.19*	Ft.	Total Well Depth	*107.28*	Ft.

FIELD DATA - GROUNDWATER WELL SAMPLING PROGRAM

SITE/JOB	*G&M OIL STATION #51*	DATE	*10/10/2005*
ADDRESS	*2155 S. ATLANTIC BLVD., COMMERCE, CA 90040*		
PERSONNEL	*FELIX/ROGER*	WEATHER	*SUNNY*
WELL NO.	*MW-6*	EQUIPMENT	*VACUUM TRUCK*

Before Purging

Total Well Depth	*106.36*	Ft.	Well Diameter	*4.00*	Inch.
Depth to Water	*88.12*	Ft.	Est. Purge Vol.	*47.64*	Gal.

Sampling Data

Initial Turbidity	*>200*			Final Turbidity	*3.88*		
D.O.	2.40	ppm		ORP	66.00	mV	

Time (MT)	*1015*	*1020*	*1025*	*1030*	*1035*		
EC	*1306*	*1365*	*1310*	*1309*	*1309*		
pH	*7.97*	*8.02*	*8.02*	*8.02*	*8.02*		
Temp. (°F)	*79.2*	*15.4*	*77.0*	*77.2*	*74.7*		
(°C)	*26.2*	*24.6*	*25.0*	*25.1*	*23.7*		
Gal.	*9.00*	*18.00*	*27.00*	*36.00*	*48.00*		
Time (MT)							
EC							
pH							
Temp. (°F)							
(°C)							
Gal.							

After Purging/Before Sample Collection

Depth to Water	*90.02*	Ft.	Total Well Depth	*106.36*	Ft.

FIELD DATA - GROUNDWATER WELL SAMPLING PROGRAM

SITE/JOB	*G&M OIL STATION #51*	DATE	*10/10/2005*
ADDRESS	*2155 S. ATLANTIC BLVD., COMMERCE, CA 90040*		
PERSONNEL	*FELIX/ROGER*	WEATHER	*SUNNY*
WELL NO.	*MW-7*	EQUIPMENT	*VACUUM TRUCK*

Before Purging

Total Well Depth	*106.34*	Ft.	Well Diameter	*4.00*	Inch.
Depth to Water	*87.57*	Ft.	Est. Purge Vol.	*49.03*	Gal.

Sampling Data

Initial Turbidity	*90.40*				Final Turbidity	*3.34*	
D.O.	3.00	ppm			ORP	80.00	mV
Time (MT)	*833*	*838*	*844*	*850*	*857*		
EC	*1254*	*1217*	*1223*	*1220*	*1217*		
pH	*7.82*	*7.85*	*7.85*	*7.86*	*7.86*		
Temp. (°F)	*69.1*	*15.4*	*70.7*	*70.9*	*71.1*		
(°C)	*20.6*	*21.5*	*21.5*	*21.6*	*21.7*		
Gal.	*10.00*	*20.00*	*30.00*	*40.00*	*49.00*		
Time (MT)							
EC							
pH							
Temp. (°F)							
(°C)							
Gal.							

After Purging/Before Sample Collection

Depth to Water	*90.01*	Ft.	Total Well Depth	*106.34*	Ft.

FIELD DATA - GROUNDWATER WELL SAMPLING PROGRAM

SITE/JOB	*G&M OIL STATION #51*	DATE	*10/10/2005*
ADDRESS	*2155 S. ATLANTIC BLVD., COMMERCE, CA 90040*		
PERSONNEL	*FELIX/ROGER*	WEATHER	*SUNNY*
WELL NO.	*MW-8*	EQUIPMENT	*VACUUM TRUCK*

Before Purging

Total Well Depth	*99.82*	Ft.	Well Diameter	*4.00*	Inch.
Depth to Water	*87.82*	Ft.	Est. Purge Vol.	*31.34*	Gal.

Sampling Data

Initial Turbidity	*87.50*				Final Turbidity	*3.26*	
D.O.	2.40	ppm			ORP	40.00	mV
Time (MT)	*946*	*950*	*955*	*1000*	*1005*		
EC	*1200*	*1268*	*1252*	*1260*	*1248*		
pH	*8.00*	*7.98*	*7.96*	*7.88*	*7.88*		
Temp. (°F)	*22.5*	*15.4*	*74.8*	*73.6*	*75.2*		
(°C)	*24.4*	*23.8*	*23.8*	*23.1*	*24.0*		
Gal.	*6.00*	*12.00*	*18.00*	*24.00*	*32.00*		
Time (MT)							
EC							
pH							
Temp. (°F)							
(°C)							
Gal.							

After Purging/Before Sample Collection

Depth to Water	*90.11*	Ft.	Total Well Depth	*99.82*	Ft.

FIELD DATA - GROUNDWATER WELL SAMPLING PROGRAM

SITE/JOB	*G&M OIL STATION #51*	DATE	*10/10/2005*
ADDRESS	*2155 S. ATLANTIC BLVD., COMMERCE, CA 90040*		
PERSONNEL	*FELIX/ROGER*	WEATHER	*SUNNY*
WELL NO.	*MW-9*	EQUIPMENT	*VACUUM TRUCK*

Before Purging

Total Well Depth	*105.86*	Ft.	Well Diameter	*4.00*	Inch.
Depth to Water	*87.67*	Ft.	Est. Purge Vol.	*47.51*	Gal.

Sampling Data

Initial Turbidity	*98.70*				Final Turbidity	*3.66*	
D.O.	3.00	ppm			ORP	77.00	mV
Time (MT)	*1048*	*1053*	*1058*	*1103*	*1110*		
EC	*1172*	*1206*	*1196*	*1187*	*1210*		
pH	*7.85*	*7.93*	*7.88*	*7.87*	*7.87*		
Temp. (°F)	*80.4*	*15.4*	*75.4*	*75.0*	*75.0*		
(°C)	*26.9*	*24.6*	*24.1*	*23.9*	*23.9*		
Gal.	*9.00*	*18.00*	*27.00*	*36.00*	*36.00*		
Time (MT)							
EC							
pH							
Temp. (°F)							
(°C)							
Gal.							

After Purging/Before Sample Collection

Depth to Water	*90.02*	Ft.	Total Well Depth	*105.86*	Ft.

FIELD DATA - GROUNDWATER WELL SAMPLING PROGRAM

SITE/JOB	*G&M OIL STATION #51*	DATE	*10/10/2005*
ADDRESS	*2155 S. ATLANTIC BLVD., COMMERCE, CA 90040*		
PERSONNEL	*FELIX/ROGER*	WEATHER	*SUNNY*
WELL NO.	*MW-10*	EQUIPMENT	*VACUUM TRUCK*

Before Purging

Total Well Depth	*108.33*	Ft.	Well Diameter	*4.00*	Inch.
Depth to Water	*87.78*	Ft.	Est. Purge Vol.	*53.68*	Gal.

Sampling Data

Initial Turbidity	*90.60*			Final Turbidity	*3.60*		
D.O.	2.80	ppm		ORP	97.00	mV	
Time (MT)	*1120*	*1226*	*1232*	*1238*	*1244*	*1251*	
EC	*1205*	*1243*	*1247*	*1280*	*1260*	*1270*	
pH	*7.96*	*6.96*	*7.82*	*7.88*	*7.78*	*7.78*	
Temp. (°F)	*80.8*	*15.4*	*75.6*	*76.3*	*76.1*	*75.4*	
(°C)	*27.1*	*25.2*	*24.2*	*24.6*	*24.5*	*24.1*	
Gal.	*9.00*	*18.00*	*27.00*	*36.00*	*45.00*	*54.00*	
Time (MT)							
EC							
pH							
Temp. (°F)							
(°C)							
Gal.							

After Purging/Before Sample Collection

Depth to Water	*90.66*	Ft.	Total Well Depth	*108.33*	Ft.

FIELD DATA - GROUNDWATER WELL SAMPLING PROGRAM

SITE/JOB	*G&M OIL STATION #51*	DATE	*10/10/2005*
ADDRESS	*2155 S. ATLANTIC BLVD., COMMERCE, CA 90040*		
PERSONNEL	*FELIX/ROGER*	WEATHER	*SUNNY*
WELL NO.	*MW-12*	EQUIPMENT	*VACUUM TRUCK*

Before Purging

Total Well Depth	*106.68*	Ft.	Well Diameter	*4.00*	Inch.
Depth to Water	*87.07*	Ft.	Est. Purge Vol.	*51.22*	Gal.

Sampling Data

Initial Turbidity	*92.60*			Final Turbidity	*3.26*	
D.O.	3.20	ppm		ORP	96.00	mV

Time	(MT)	*1525*	*1536*	*1542*	*1548*	*1554*	*1602*
EC		*1178*	*1196*	*1219*	*1211*	*1225*	*1220*
pH		*7.75*	*7.77*	*7.76*	*7.74*	*7.73*	*7.73*
Temp.	(°F)	*82.8*	*15.4*	*76.3*	*75.4*	*74.1*	*73.9*
	(°C)	*28.2*	*25.7*	*24.6*	*24.1*	*23.4*	*23.3*
Gal.		*9.00*	*18.00*	*27.00*	*36.00*	*45.00*	*52.00*
Time	(MT)						
EC							
pH							
Temp.	(°F)						
	(°C)						
Gal.							

After Purging/Before Sample Collection

Depth to Water	*91.36*	Ft.	Total Well Depth	*106.68*	Ft.

SAMPLING PROCEDURES FOR GROUNDWATER

Sample Collection - Purging Method

1. Integrity of the well cover, well cap and top of casing are established and noted for future reference.

2. Non-dedicated equipment is decontaminated using a steam cleaner or "three bucket" wash.

3. Depth to water, depth to product (if present) and total depth of well are determined using an Oil Recovery Systems' Interface probe or equivalent (0.01 accuracy).

4. Groundwater is removed from the well by bailing or pumping until dry or until at least 4 well volumes have been purged and water quality parameters (pH, conductivity and temperature) stabilized. The water is discharged into DOT 55 gallon drums.

5. After the well has recovered at least 80 percent, a sample is taken just below the water surface using a bailer (teflon, stainless steel or disposable bottom emptying) and placed into a laboratory supplied containers. The containers are completely filled and the cap immediately placed over the top and securely tightened. Vials are inverted and tapped to determine if air bubbles are present. Samples are labeled, and placed on ice until delivery to the laboratory.

Sample Collection - No Purge Method

1. Integrity of the well cover, well cap and top of casing are established and noted for future reference.

2. Non-dedicated equipment is decontaminated using a steam cleaner or "three bucket" wash.

3. Depth to water, depth to product (if present) and total depth of well are determined using an Oil Recovery Systems' Interface probe or equivalent (0.01 accuracy).

4. A sample is taken just below the water surface using a bailer (Teflon, stainless steel or disposable, all bottom emptying) and placed into a laboratory supplied vial. The vial is completely filled, cap immediately placed over the top and securely tightened. The vial is inverted and tapped to determine if air bubbles are present. If none, the sample is labeled, and placed on ice until delivery to the laboratory.

Quality Control/Quality Assurance

1. The field data sheet is completed with all pertinent data such as; integrity of well, quantity of water purged, pH, temperature, and specific conductance, if available.

2. The samples are transported to the laboratory as soon as possible following chain-of-custody procedures. In the event a holding time of greater than 7 days is required, the laboratory will be requested to supply vials with the appropriate preservatives for the analyses requested.

3. Wells are sampled from the order of least to highest concentrations, if known.

4. Site conditions are noted which may potentially contaminate the sample i.e. smoke, vapors from running engines, etc.

5. If a single bailer is used for collection of all samples, an "equipment blank" sample will be collect following the same protocol of sample collection. The same water supply used to rinse the equipment will be used to collect the blank sample.

6. A trip blank, if required, supplied by the analytical laboratory will be stored and transported with the samples until their delivery back to the laboratory.

7. The blank samples will be analyzed for all constituents.

Sample Shipment and Chain-of-Custody

Complete records are kept on each sample including sampling date, sample type, location, and other pertinent information. The sample containers are banded and sealed with chain-of-custody seals. The samples are chilled in an ice chest using block or blue ice. Care is taken not cause sample freezing which may result in container breakage during transport to the laboratory.

Chain-of-Custody procedures, generally described in Test Methods for Evaluating Solid Waste, SW-846, U.S. EPA, 1982, are followed. A chain-of-custody form accompanies the sample from the place of collection to the laboratory, and through the completion of the analytical process. The chain-of-custody form includes project identification information, the sample type and number, the date and time of sampling, the chemical analyses requested, and the identity of the person taking possession at each change of custody.

Equipment Cleaning

When steam-cleaning is not available, the "three bucket" wash is used. The three bucket wash consists of an Alconox solution cleaning, a tap water rinse and a distilled water rinse. No solvent (hexane) rinses will be used. For bailers, the Alconox solution is flushed completely through the inside followed by flushing with tap and distilled water. When submersible, bladder or double-diaphragm pumps are used (non-dedicated), the solution of Alconox is cycled through the pump body and hoses followed by similar water rinses.

Waste Storage and Disposal

The effluent and/or decontamination water generated during the testing and equipment cleaning is placed in 55 gallon D.O.T. drums. The drums are sealed, labeled and left on site pending disposal/ treatment by owner.

APPENDIX B

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LOS ANGELES REGION

LABORATORY REPORT FORM (COVER PAGE 1)

Laboratory Name: Southhland Technical Services Environmental Labs

Address: 7801 Telegraph Road, Suite L. Montebello, CA 90640

Telephone/Fax: (323) 888-0728 / (323) 888-1509

ELAP Certification No.: 1986 Expiration Date: 04-30-2006

Authorized Signature
Name, Title (Print): Roger Wang, Laboratory Director

Signature, Date: _____, 10-17-2005

Client: Atlas Environmental Engineering
Project: G & M Oil Co. #51
Project Site: 2155 S. Atlantic Blvd., Commerce, CA.
Lab Job No.: R510045

Date(s) Sampled: 10-10-2005 To 10-10-2005

Date(s) Received: 10-10-2005 To 10-10-2005

Date(s) Reported: 10-17-2005

Chain of custody received: Yes X No _____

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LOS ANGELES REGION

LABORATORY REPORT FORM (COVER PAGE 2)

Organic Analyses	# of Samples:	# of Samples Subcontracted:
EPA 8015M (Gasoline)	11	0
EPA 8015M (Diesel)	11	0
EPA 8260B (BTEX & Oxygenates)	11	0
Methane by GC/FID	11	0

Sample Condition: Chilled, intact, good condition

Inorganic Analyses	# of Samples:	# of Samples Subcontracted:
Nitrate (EPA 352.1)	11	0
Sulfate (EPA 375.4)	11	0
Ferrous Iron (Colormetry)	11	0

Sample Condition: Chilled, intact, good condition

Microbiological Analyses	# of Samples:	# of Samples Subcontracted:
	0	0

Sample Condition:

Other Types of Analyses	# of Samples:	# of Samples Subcontracted:
	0	0

Sample Condition:

ANALYTICAL TEST RESULT
Reporting Unit: µg/L (ppb)

Date of Analysis for TPH (Gasoline)			10-13-05	10-13-05	10-13-05	10-13-05	10-13-05	10-13-05
Date of Extraction for TPH (Gasoline)			NA	NA	NA	NA	NA	NA
Extraction Method for TPH (Gasoline)			5030	5030	5030	5030	5030	5030
Dilution Factor for TPH (Gasoline)			1	1	1	10	2	1
Date of Analysis for TPH (Diesel)			10-12-05	10-12-05	10-12-05	10-12-05	10-12-05	10-12-05
Date of Extraction for TPH (Diesel)			10-12-05	10-12-05	10-12-05	10-12-05	10-12-05	10-12-05
xtraction Solvent for TPH (Diesel)			Hexane	Hexane	Hexane	Hexane	Hexane	Hexane
Dilution Factor for TPH (Diesel)			1	1	1	1	1	1
LAB SAMPLE I.D.				R510045-1	R510045-2	R510045-3	R510045-4	R510045-5
CLIENT SAMPLE I.D.				MW-1	MW-2	MW-3	MW-4	MW-5
COMPOUND		**MDL**	**MB**					
TPH-Gasoline (C4 - C12)		50	ND	120	ND	7,480	1,530	68.5
TPH-Diesel (C13 - C23)		500	ND	ND	ND	ND	ND	ND
Surrogate	Spk Conc.	ACP%	MB %RC	%RC	%RC	%RC	%RC	%RC
BFB (for TPH-Gasoline)	20 ppb	70-130	97	96	97	96	97	95
Diocthyl Phthalate (for TPH-Diesel)	5 ppm	70-130	125	95	78	83	85	85

SPK Conc.=Spiking Concentration; ACP%=Acceptable Range of Percent; %RC=% Recovery
MDL=Method Detection Limit; MB=Method Blank; ND=Not Detected(Below MDL); NA=Not Analyzed

ANALYTICAL TEST RESULT
Reporting Unit: µg/L (ppb)

Date of Analysis for TPH (Gasoline)			10-13-05	10-13-05	10-13-05	10-13-05	10-13-05	10-13-05
Date of Extraction for TPH (Gasoline)			NA	NA	NA	NA	NA	NA
Extraction Method for TPH (Gasoline)			5030	5030	5030	5030	5030	5030
Dilution Factor for TPH (Gasoline)			2.5	1	1	1	1	1
Date of Analysis for TPH (Diesel)			10-12-05	10-12-05	10-12-05	10-12-05	10-12-05	10-12-05
ate of Extraction for TPH (Diesel)			10-12-05	10-12-05	10-12-05	10-12-05	10-12-05	10-12-05
Extraction Solvent for TPH (Diesel)			Hexane	Hexane	Hexane	Hexane	Hexane	Hexane
Dilution Factor for TPH (Diesel)			1	1	1	1	1	1
LAB SAMPLE I.D.			R510045-6	R510045-7	R510045-8	R510045-9	R510045-10	R510045-11
CLIENT SAMPLE I.D.			MW-6	MW-7	MW-8	MW-9	MW-10	MW-12
COMPOUND		**MDL**						
TPH-Gasoline (C4 - C12)		50	1,440	ND	ND	ND	111	57.9
TPH-Diesel (C13 - C23)		500	ND	ND	ND	ND	ND	ND
Surrogate	Spk Conc.	ACP%	%RC	%RC	%RC	%RC	%RC	%RC
BFB (for TPH-Gasoline)	20 ppb	70-130	96	95	99	100	99	103
Diocthyl Phthalate (for TPH-Diesel)	5 ppm	70-130	95	93	95	93	80	88

SPK Conc.=Spiking Concentration; ACP%=Acceptable Range of Percent; %RC=% Recovery
MDL=Method Detection Limit; MB=Method Blank; ND=Not Detected(Below MDL); NA=Not Analyzed

ANALYTICAL TEST RESULT (EPA 8260B)
Reporting Unit: µg/L (ppb)

DATE ANALYZED			10-13-05	10-13-05	10-13-05	10-13-05	10-13-05	10-13-05
DATE EXTRACTED			----	----	----	----	----	----
DILUTION FACTOR			1	1	1	10	2	1
LAB SAMPLE I.D.			Blank	R510045-1	R510045-2	R510045-3	R510045-4	R510045-5
CLIENT SAMPLE I.D.				MW-1	MW-2	MW-3	MW-4	MW-5
COMPOUND	**MDL**	**EQL**	**MB**					
Benzene	1	1	ND	ND	ND	929	217	1.3
Toluene	1	1	ND	ND	ND	1,300	114	ND
Ethylbenzene	1	1	ND	ND	ND	332	29.3	ND
Total Xylenes	2	2	ND	ND	ND	1,680	311	ND
Methyl tert-butyl Ether	2	2	ND	99.3	ND	268	485	30.9
Ethyl t-butyl Ether	2	2	ND	ND	ND	ND	ND	ND
Di-isopropyl Ether	2	2	ND	ND	ND	ND	ND	ND
T-amyl-methyl Ether	2	2	ND	ND	ND	ND	ND	ND
Tert-Butanol	10	10	ND	ND	ND	ND	ND	ND
SURROGATE	**SPK CONC.**	**ACP%**	**MB %RC**	**%RC**	**%RC**	**%RC**	**%RC**	**%RC**
Dibromofluoro-methane	25ppb	70-130	87	87	85	90	88	92
Toluene-d8	25ppb	70-130	80	84	79	87	90	79
Bromofluoro-benzene	25ppb	70-130	106	105	105	105	110	104

SPK Conc.=Spiking Concentration; ACP%=Acceptable Range of Percent; %RC=% Recovery
MDL=Method Detection Limit; MB=Method Blank; ND=Not Detected(Below MDL); NA=Not Analyzed;
EQL=Estimated Quantification Limit
J=above MDL but below EQL

ANALYTICAL TEST RESULT (EPA 8260B)
Reporting Unit: µg/L (ppb)

DATE ANALYZED			10-13-05	10-13-05	10-13-05	10-13-05	10-13-05	10-13-05
DATE EXTRACTED			----	----	----	----	----	----
DILUTION FACTOR			2.5	1	1	1	1	1
LAB SAMPLE I.D.			R510045-6	R510045-7	R510045-8	R510045-9	R510045-10	R510045-11
CLIENT SAMPLE I.D.			MW-6	MW-7	MW-8	MW-9	MW-10	MW-12
COMPOUND	**MDL**	**EQL**						
Benzene	1	1	6.2	ND	ND	ND	ND	ND
Toluene	1	1	30.6	ND	ND	ND	ND	ND
Ethylbenzene	1	1	16.9	ND	ND	ND	ND	ND
Total Xylenes	2	2	95.8	ND	ND	ND	ND	ND
Methyl tert-butyl Ether	2	2	135	ND	ND	ND	70.0	5.2
Ethyl t-butyl Ether	2	2	ND	ND	ND	ND	ND	ND
Di-isopropyl Ether	2	2	ND	ND	ND	ND	ND	ND
T-amyl-methyl Ether	2	2	ND	ND	ND	ND	ND	ND
Tert-Butanol	10	10	ND	ND	ND			

R5/10045

ATLAS ENVIRONMENTAL ENGINEERING, INC. CHAIN OF CUSTODY FORM

P.O. NUMBER	SITE/PROJECT NAME
G&M #51	G & M OIL CO. #51
JOB NUMBER	**SITE/PROJECT LOCATION**
G51-Q405-FV	2155 S. ATLANTIC BOULEVARD COMMERCE, CA 90040

SAMPLER(S) SIGNATURE

QUARTERLY WATER SAMPLING

SUBMIT RESULTS TO:

ATLAS ENVIRONMENTAL ENG.
15701 CHEMICAL LANE
HUNTINGTON BEACH, CA 92649

ATTN: CONSTANTIN TUCULESCU
PHONE NO. (714) 890-7129
FAX NO. (714) 890-7149

SAMPLE NUMBER (I.D.)	YEAR 2005 DATE MM/DD	TIME AM/PM	DEPTH BELOW GRADE (ft)	NO. OF CONTAINERS	ANALYTICAL METHOD: TPHg 8015M	TPHd 8015M	8260B BTEX MTBE FULL SCAN	METHANE NITRATE SULFATE FERROUS IRON		REMARKS
MW-1	10-10-05	9:59		4V-1B	X	X	X	X	R5/10045	1
MW-2	10-10-05	10:21		4V-1B	X	X	X	X	"	2
MW-3	10-10-05	11:48		4V-1B	X	X	X	X	"	3
MW-4	10-10-05	12:26		4V-1B	X	X	X	X	"	4
MW-5	10-10-05	1:00		4V-1B	X	X	X	X	"	5
MW-6	10-10-05	1:36		4V-1B	X	X	X	X	"	6
MW-7	10-10-05	2:41		4V-1B	X	X	X	X	"	7
MW-8	10-10-05	3:08		4V-1B	X	X	X	X	"	8
MW-9	10-10-05	3:35		4V-1B	X	X	X	X	"	9
MW-10	10-10-05	4:00		4V-1B	X	X	X	X	"	10
MW-11				4V-1B	X	X	X	X		F.P.
MW-12	10-10-05	4:35		4V-1B	X	X	X	X	"	11

SAMPLES INTACT:	YES...✓...	NO.....	
SAMPLES PROPERLY COOLED:	YES...✓...	NO.....	
TEMPERATURE STORED:	4°C		
PRESERVATIVES ADDED (YES) NO.. TYPE:	HCl		
SAMPLES ACCEPTED:	YES...✓...	NO.....	
IF NOT, WHY:			
SAMPLES PLACED IN LAB REFRIGERATOR			
YES...✓...	NO.....	REP. INITIALS...R.W.	
LABORATORY NAME:	STS		

RELINQUISHED	DATE/TIME	DATE/TIME	RECEIVED
RELINQUISHED BY (SIGNATURE)/COMPANY: ATLAS	DATE/TIME: 10-10-05 5:15 PM	DATE/TIME: 10-10-05 5:15 PM	RECEIVED BY (SIGNATURE)/COMPANY:
RELINQUISHED BY (SIGNATURE)/COMPANY:	DATE/TIME	DATE/TIME	RECEIVED BY (SIGNATURE)/COMPANY:
RELINQUISHED BY (SIGNATURE)/COMPANY:	DATE/TIME	DATE/TIME	RECEIVED BY (SIGNATURE)/COMPANY:

APPENDIX C

Site Address: 2155 South Atlantic Boulevard, Commerce, CA (G51)			**Range**
X axis dispersivity	**10**	ft	0.1-10
Y axis dispersivity	**0.33**	ft	(0.33~0.65) D_x
Distance parallel to direction of GW flow	**120**	ft	
Distance perpendicular to direction of GW flow	**15**	ft	
Groundwater velocity	**0.075**	ft/day	0.01-3.0
Source concentration	**2.57E+09**	ug/L	**2.57E+06**
Rate of discharge	**25**	ft^2/yr	**mg/L**
Discharge duration or *dt*	**8.33E-02**	yr	
Mass discharged per unit depth (C_oQdt)	**1.52E+11**	ug/ft	
	1.52E+05	g/ft	
Distance (X_2) to DG well 2	**180**	ft	
Distance (Y_2) perpendicular to direction of flow	**17**	ft	
Distance (X_3) to drinking water well	**1600**	ft	
Distance (Y_3) perpendicular to direction of flow	**250**	ft	
Maximum concentration in drinking water well	**0.00**	ug/L	
Time when plume reached its peak in DW well	**28000**	days	
Time when plume first reached 5 ug/L in DW well	**0**	days	
Time remaining for plume to reach 5 ug/L in DW well	**-24.4**	years	

Soil Type	Velocity Range
Gravel	up to 3 ft/d
Coarse Sand	up to 1.5 ft/d
Clean Sand	up to 1.0 ft/d
Fine Sand	up to 0.5 ft/d
Silty Sand	up to 0.1 ft/d
Sandy Silt	0.01-0.05 ft/d
Silty	0.01 ft/d

Soil Type	**Date Release Discovered**
	5/26/1997
	Date of 1st Monit. Event
	5/28/2002

Well Name	Well No	Distance(x)	Distance(y)	C (ug/L)	Time (days)
Downgradient Well 1 at T_1	**MW-3**	**120**	**15**	**619**	**1883**
T_2				**385**	**1974**
T_3				**357**	**2045**
T_4				**590**	**2138**
T_5				**798**	**2226**
T_6				**2130**	**2312**
T_7				**610**	**2403**
T_8				**333**	**2500**
T_9				**732**	**2606**
T_{10}				**830**	**2702**
T_{11}				**708**	**2769**
T_{12}				**70.7**	**2843**
T_{13}				**1560**	**2902**
T_{14}				**751**	**2994**
T_{15}				**268**	**3091**
T_{16}					
T_{17}					
T_{18}					
T_{19}					
Date of Last Record	**10/10/2005**			**Date of First Record**	**5/28/2002**
Downgradient Well 2 at T_1	**MW-12**	**180**	**17**	**73.3**	**2606**
T_2				**23.7**	**2702**
T_3				**138**	**2769**
T_4				**125**	**2843**
T_5				**23.5**	**2902**
T_6				**16.7**	**2994**
T_7				**5.2**	**3091**
T_8					
T_9					
T_{10}					
T_{11}					
T_{12}					
T_{13}					
T_{14}					
T_{15}					
Date of Last Record	**10/10/2005**			**Date of First Record**	**5/12/2004**

Comment Max Time (data)
8902